

# API Centre Customer Experience Guidelines

August 2020

Version 1.0



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# 1 Introduction

The Customer Experience Guidelines ("Guidelines") have been designed to facilitate widespread use of API Standards enabled products and services in a simple, secure and Customer friendly manner.

The implementation of these Guidelines is not mandated by the API Centre and as a result, an API Provider's customer experience may differ from this document.

The API Centre's v2.0.0 Account Information and Payments Initiation API Standards set out the base interactions and flows between the Customer, the Third Party, and the API Provider.

These guidelines;

- bring together Customer facing user experience and journey across both Third Party and API Provider when they use the API Standards.
- address the "Customer journey" that is the process that the Customer follows starting within a Third Party online app or browser, through to authentication within the API Provider domain, and completion in the Third Party domain.
- provide examples of what a good Customer experience and Customer journey looks like when the Customer interacts with services that are based on the API Standards
- and, provide a starting point for API Standards Users to develop their own propositions.

Customers will only use products and services if their experience matches or betters their expectations, and information is presented in an intuitive manner that allows them to make informed decisions.

It is therefore important that the interplay between the Third Party and the API Provider is as seamless as possible while providing Customer control in a secure environment. It is essential that Customers are clearly informed about the consent they are providing and the service they are receiving.

The intended audience for these Guidelines is API Standards Users (API Providers and Third Parties).

# 1.1 Acknowledgements

These Guidelines have been developed from the UK Open Banking Implementation Entity's Customer Experience Guidelines<sup>1</sup> and their associated research.

# 1.2 Purpose and approach

#### Best practice guide

This document provides a best practice illustrative guide, and there is no requirement on API Standards Users to comply with these Guidelines. The Guidelines help provide a starting point for API Standards Users to develop their own propositions and implementations may differ in practice.

<sup>&</sup>lt;sup>1</sup> https://standards.openbanking.org.uk/customer-experience-guidelines/introduction/section-a/latest/



#### • Illustrative but not exhaustive

These Guidelines provide the main scenarios that the v2.0 API Standard supports. There are other scenarios, flows or variants that are supported by the v2.0 API Standard that are not illustrated in these Guidelines.

#### • Iterative guidance

This document will evolve, and iterations will be frequently released, based on additional functionality, ongoing feedback received and changing Customer expectations.

#### Enduring payment consent to be added

Guidelines to support enduring payment consent will be published as a major iteration update to these Guidelines.

#### 1.2.1 Document status

Version 2.0 of the API Standard introduces specifications for enduring payment consent. This edition of the Guidelines does not cover this functionality at this time, however this will be included in future iterations.

#### 1.3 Disclaimer

The Guidelines have been prepared for the sole purpose of providing indicative information and are for general purposes only. The Guidelines should be treated as a general guide or a starting point only. The Guidelines are not specific advice and do not contain all of the information that an API Standards User may need for the purpose of designing and using API Standards enabled products or complying with the API Centre Terms and Conditions (**API Terms**).

In particular, adoption of the Guidelines does not replace API Standards Users' obligations as set out in the API Terms. API Standards Users must independently ensure that they comply with the API Terms and, in particular, the Customer Data Consent and Customer Payment Consent obligations. To the extent that the Guidelines conflict with the API Terms, the API Terms prevail.

The API Centre does not make any express or implied warranty, guarantee or representation regarding the Guidelines, including, without limitation, warranties that the Guidelines are fit for the purposes required by the API Standards Users, Customers or Permitted Users, that compliance with the Guidelines assures compliance with the API Centre Terms or that any of the assumptions underlying the Guidance are accurate.

# 1.4 Relationship with API Centre Terms and Conditions

The Guidelines cover the Customer journey, interaction and hand off separately. The Guidelines include suggested steps that the Customer should navigate, including in relation to consent. The Guidelines refer to **consent** and **authentication**. The steps which API Standards Users are required to take in relation to consent and authentication are set out in clause 7 of the API Terms. In these Guidelines:



**Third Party Consent** in relation to **Customer Data Consent** refers to the consent given by the Customer to a Third Party under which the Customer authorises:

- a Third Party to contact the Customer's API Provider; and
- the use of the Customer Data for the purposes specified in the Customer Data Consent.

**Third Party Consent** in relation to **Customer Payment Consent** refers to the consent given by a Customer to a Third Party under which the Customer authorises:

- a payment under which funds will be debited from the Customer's account and credited to the beneficiary nominated in the consent; and
- a Third Party to contact the Customer's API Provider.

**Authentication** in relation to Customer Data Consent refers to the consent given by the Customer to an API Provider under which the Customer authorises an API Provider to act on an instruction received from the Third Party in relation to Customer data.

**Authentication** in relation to Customer Payment Consent refers to the consent given by the Customer to an API Provider under which the Customer authorises an API Provider to act on an instruction received from a Third Party, on behalf of the Customer in respect of that payment transaction.

# 1.5 Relationship with v2.0.0 API standard

The API Centre has attempted to align to the v2.0 API Standard. Generally, where the Customer journey diagrams use the term 'must', it reflects a requirement of the v2.0 API Standard. The 'must' and 'should' settings described in the Guidelines document are not to be relied upon as a description of the v2.0 API Standard and do not alter the best practice nature of the Guidelines or impose any obligation on API Standards Users to comply with these Guidelines.

# 1.6 Document structure

The following principles underpin the core Customer journey described in three sections:

#### • Authentication Methods

The primary forms of Authentication, in generic form, that may be used through a variety of services and interactions.

#### • Account Information Services (AIS)

Service propositions that are enabled or initiated by Customers consenting to share their payment account data with Third Parties.

#### Payment Initiation Services (PIS)

Service propositions enabled by Customers consenting to Third Parties initiating payments from their payment accounts.

API Providers should be familiar with their own role and that of others across all these proposition types.



Third Parties will naturally focus on the proposition types that are relevant to their business model, but they should still be aware of the roles of all others to ensure they understand the lines of demarcation and differences between each type.

The Customer journey is described for each of the core use cases. It is important to note that the Guidelines do not set out every variation or possible scenario that the API Standards support. The Guidelines provide illustrative examples of the key Customer journeys. In some cases, the Guidelines indicate where there could be other variations on the Customer journey, but the Guidelines will not go into the identified variation in any detail.

Each unique journey has been broken out and described over a number of stages. They can then be referenced in a number of ways according to individual priority e.g. whether the reader is, for example, a Regulatory Expert, Product Owner, Technical Lead or CX Designer. The stage types are:

#### • Journey Description

A high-level description of the specific account information, payment initiation or confirmation of funds Customer journey.

#### Journey Map

This is a macro view of the Customer journey, broken down by optimal steps and Customer interaction points e.g. from payment initiation through authentication to completion.

#### Wireframe Journey

This is represented by annotated 'screens' to identify key messages, actions, interactions and information hierarchy, as well as process dependencies.

#### Journey Annotations

This is the annotation detail referenced in the wireframes. These consist of CX considerations, where research has raised specific Customer priorities or concerns that should be addressed through the eventual solution.

# 1.7 The API standard Customer journey

The Guidelines have been separated into a set of clear, highly simplified white label wireframes that cover the Customer journey, interaction and hand off separately.

These are intended to be platform agnostic, to place focus on only the key elements (e.g. messages, fields, checkboxes) and the steps that the Customer should navigate.

In all cases they are constructed around the primary API Standard Customer journey, which is illustrated below.

At the core of each API Standard Customer journey is the mechanism by which the Customer gives consent to a Third Party to access account information held at their API Provider or to initiate payments from their API Provider account.

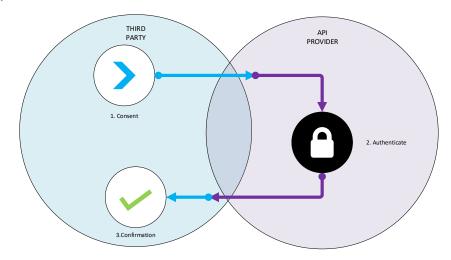
In general, simplified terms:

1. the consent request is initiated in the Third Party domain (step 1 left).

**API Centre Customer Experience Guidelines** 



- 2. the Customer is then directed to the domain of its API Provider for authentication (step 2 right).
- 3. then, once authentication is complete, the API Provider will be able to respond to the Third Party's account information or payment initiation request and redirect the Customer back to the Third Party for confirmation and completion of the journey (step 3 left).





# 2 Customer journey

# 2.1 Customer in control

So that Customers can make informed decisions while enjoying a simple and easy navigation and a secure Customer journey, a key principle is to ensure clarity of information that is presented and described in a manner that ensures that each API Standard Customer journey is easy to understand.

# 2.2 Useful elements in the Customer journey

Many Customers skim through the information presented to them when setting up online products because [when] the information is not well presented.

In their desire to achieve the benefit, insufficient notice is taken of the implications of their actions, or the terms and conditions. It is common to find that they cannot describe what they have just agreed to.

Research carried out by the Open Banking Implementation Entity (OBIE), based in the UK, shows that better understanding can be achieved by carefully designing the Customer journey. It reveals that the solution is about:

- effective, intuitive presentation of information,
- not introducing steps to slow the Customer down or repeat information.

#### The following methods have been found to be the most effective:

- Clear messages and navigation in the redirection screens that pass the Customer from the Third Party to the API Provider and back again.
- The redirection screen should create a clear sense of separation as the Customer enters the API Provider domain to authenticate, and as they return to the Third Party. Use redirect screens as signposts so Customers know and trust where they are in the journey.
- Present information in an intuitive and easily understood way.
- Keep it to a minimum.
- When it is necessary to present more complex information it is easier for the Customer to understand when:
  - o presented in a series of smaller amounts,
  - o across more than one screen.
- Avoid text heavy single screens.
- Providing supplementary information at specific points in the Customer journey is useful, helping the Customer to understand the process as well as ensuring comprehension of a product or offer and its implications. If executed well, it will enhance the Customer journey and reduce drop off.
- Experience and branding should mirror existing online Customer channels.



# 2.3 Unhelpful elements in the Customer journey

Research by OBIE has shown that superfluous information, poor or confusing choice of words, repetition, large amounts of text, too many steps or avoidable delays in the Customer journey can lead to frustration, an even greater tendency to skim, and ultimately an increase in Customer drop off.

# The following unhelpful elements were identified in the research and should be avoided:

- A Customer authentication journey that takes too long and requires the use of separate devices such as one-time password generators, especially if applied multiple times in the Customer journey.
- Where there are fewer screens but a significant amount of text on the screen.
- Customers having to scroll up and down the screen to progress the Customer journey.
- Unnecessary information that does not add to the Customer's understanding or trust, especially when presented in a separate step or screen.
- Delays such as slow loading times, web pages or apps that have not been effectively debugged, and unexpected crashing of web pages or apps.
- Language which may create a level of concern, uncertainty and doubt when going through the Customer journey.
- The use of language that is too long, complex or legalistic to be easily understood when going through the Customer journey.
- Asking for the same information twice.
- Asking for information when it is not needed.
- Forcing the Customer to open a new browser window during the Customer journey.
- Asking a Customer to input information that they don't readily have to hand, such as unique Customer reference numbers.
- Requesting input of information that could be pre-populated once the Customer has authenticated.
- Inconsistency in selecting an online channel when multiple channels are supported e.g. differentiating between personal and business banking.

# 2.4 Customer experience principles

The API Standard Customer experience should balance informed decision making while remaining understandable, intuitive and effective. The Customer experience should be shaped and positioned into content and functionality that clearly communicates and facilitates purpose, intent and relevance.

This is especially true in the act of giving consent context, where Customers always need to know and understand:

- where they are in a specific process (and what they should expect from that process);
- where they have come from;
- what options, actions or steps they have in front of them (if any);
- the (implicit) consequences of taking those actions or next steps; and
- a clear signal, feedback and/or response, once that action is taken.



It is essential to move beyond the pure mechanics of the transactional process and into a meaningful, supportive and trusted experience that directly addresses the Customer's needs, goals and concerns. This can be achieved in the way the act of giving consent is structured, but also how it is expressed, designed and organised around a range of changing human needs.

A series of guiding 'experience principles' are outlined below that can be, through careful design, developed into a process or transaction and dialled up and down where certain interactions become more critical.

These guiding experience principles are deeply Customer centred. They are used to drive and focus design and User Experience (UX) decisions, i.e. what kind of widget, interaction, font, colour, technology, UX and User Interface (UI) best serves the aspirations and requirements of the business but also meets the needs of the Customer in a simple and effective way.

Extensive Customer research undertaken by OBIE has demonstrated certain recurring themes that Customers deeply care, or are worried, about. To support and achieve the goal of creating trust, these themes have been combined and made into a few key experience principles when implementing API enabled Customer solutions. These principles underpin the range of core journeys and key Customer interactions described throughout the Guidelines.



#### 2.4.1 Control

The introduction of any kind of new transaction, product or service - especially online - can create an opportunity for deeper engagement. However, it can also create barriers through poor implementation. From a consumer perspective, this is often driven by a loss of control in the process.

If Customers understand what is going on in a process, they are able to make informed decisions and choices on their own terms – including the option to change their mind. It provides ownership and control over what is happening. In a transactional context, where money and data are potentially at stake, getting this right is essential.

For API Standards, control comes from providing Customers with the right tools and clarity of information at the right time (e.g. knowing the account balance at the point of payment or knowing that they can view and revoke consents given when they feel it is appropriate to do so).

Standards Users need to consider how they provide ownership and control to Customers throughout – enabling Customers to understand and take ownership of the decisions made



through this process and that this is something that they are choosing and in charge of.

#### 2.4.2 Speed

Speed should be appropriate to the Customer and the journey they are undertaking. Convenient, speedy and intuitive design is a question of execution and interaction.

In transactional context, anything that seems more time consuming or difficult than Customers are used to [or expecting] is going to degrade adoption. Each interaction should be managed and optimised, as well as hand-off between systems for speed, clarity and efficiency, but without sacrificing the principles of security and control.

In addition, be mindful that speed of transaction or interaction is not necessarily about the 'fastest possible' experience. As we have indicated, informed decision making needs to be supported through comprehension and clarity (especially in the context of Account Information Services), allowing Customers to, above all, move at a pace that suits them and ensuring that the Customer knows what they are consenting to.

Third Parties and API Providers need to ensure that API Standard Customer journeys remain flexible enough to support different Customer contexts, expectations and situations and – critically - avoid any unnecessary friction in the completion of any journey.

#### 2.4.3 Transparency

Transparency of choice, action, and, importantly, the consequences of actions or sharing of data is crucial to promoting the benefits of API Standards.

In new transactional scenarios where Customers are being encouraged to share personal information this is critical. Be clear on what is required from the Customer, why, for what purpose and what the consequences could be.

Sharing information is a trade-off for convenience and benefits. The value exchange for the consumer should be made explicitly clear.

This is, however, a balancing act. We do not want to overburden the Customer or weigh down the experience with excessive explanations. Transparency is therefore about providing progressive levels of information, in plain language, that inform and support Customer decisions.

## 2.4.4 Security

In the context of Security, the key concerns for Customers are fraud and data privacy.

Many will understand fraud, but data privacy may be less well defined in the minds of consumers. Not everyone has the same idea about what 'my data' means (e.g. is it my name and address? Passwords? Names of my kids? Transactional history?) Nor is it well understood what businesses even do with their data once they have access to it. Such concerns can be even deeper with newer brands, lacking established consumer confidence.



Explicit clarity and reassurance will be required in relation to data definition, use, security and, above all, protection.

In addition to personal data, transactional (data) security is the critical factor to ensure long term use of Third Party services. As a minimum, Third Parties and API Providers should ensure this is no less than consumers expect today.

As a new service, all security messaging should be clear and reassuring in tone, but not alarmist.

#### 2.4.5 Trust

Building trust with early adopting Customers is crucial and can be done by communicating clearly what is going to happen and ensuring their experience matches that.

The principles of control, speed, transparency and security combine to create a trusted environment for the Customer.

Standards Users need to consider, create and promote values of trust through every part of their API Standard Customer journeys, to foster understanding, acceptance and adoption of new innovative products and services.

## 2.5 Protection for vulnerable Customers

Standards users should be thinking of making their services suitable for vulnerable Customers. Those who are seen as vulnerable, or in vulnerable circumstances, may be significantly less able to effectively manage or represent their own interests than the average Customer, and more likely to suffer detriment. This may take the form of unusual spending, taking on unnecessary financial commitments or inadvertently triggering an unwanted event.

Any Customer can become vulnerable at any time in their life, for example through serious illness or personal problems such as divorce, bereavement or loss of income. Consent and data privacy issues are particularly relevant and important for people with mental health issues.

For reference, the NZBA and NZHRC have published guidelines that specifically relate to the provision of services to vulnerable persons:

- <a href="https://www.nzba.org.nz/consumer-information/code-banking-practice/older-and-disabled-Customer-guidelines/">https://www.nzba.org.nz/consumer-information/code-banking-practice/older-and-disabled-Customer-guidelines/</a>.
- <a href="hrc.co.nz/our-work/economic-and-social-rights/past-work/canterbury-earthquake-recovery/red-zones-report/best-practice-guidelines-prioritisation-vulnerable-Customers/">hrc.co.nz/our-work/economic-and-social-rights/past-work/canterbury-earthquake-recovery/red-zones-report/best-practice-guidelines-prioritisation-vulnerable-Customers/</a>

It should be noted, however, that Guidelines still apply to the provision and communication of services to vulnerable persons. A Standards User should look to enhance the service provided in ways that would benefit an identified vulnerable group i.e using large print or clear fonts for users with impaired vision.



# 3 Authentication methods

#### 3.1 Overview

The API Standards will support both redirection and decoupled authentication to allow a Customer to use the same authentication mechanisms while using a Third Party as they use when accessing the API Provider directly.

The general principles that apply relating to authentication are:

- 1. API Providers authenticate a Customer: This needs to go through a Strong Customer Authentication (SCA) at the Customer's API Provider for a Third Party request (i.e. access to information or payment initiation) and must be actioned by the API Provider.
- 2. Customers should have their normal authentication methods available: A Customer should be able to use the elements they prefer to authenticate with their API Provider if supported when interacting directly with their API Provider.
- 3. Parity of experience: The Customer experience when authenticating within a journey with a Third Party should involve no more delay or friction than the equivalent experience with their API Provider.
- 4. Once per session SCA: SCA should not be required more than once for a single session of access to account information or a single payment initiation.
- 5. No Obstacles: API Providers should not create unnecessary delay or friction during authentication including unnecessary or superfluous steps, attributes, or unclear language, e.g. advertising of API Providers products or services, language that could discourage the use of Third Party services or additional features that may divert the Customer from the authentication process (with the potential exception of services provided to vulnerable Customers).

## 3.2 Redirection based authentication

#### 3.2.1 Browser based redirection – Account Information Services

#### 3.2.1.1 Journey description

Customer authentication with the API Provider using browser based redirection from a Third Party for an Account Information Services request.

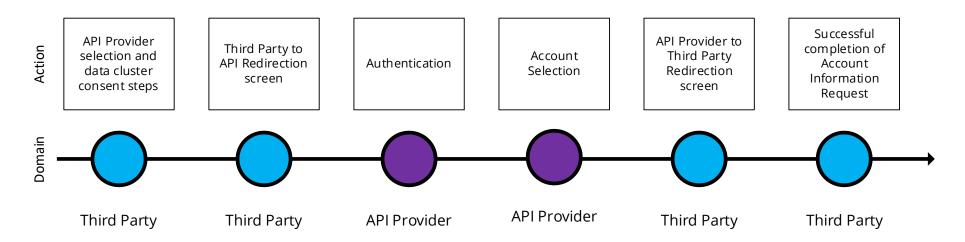
This enables a Customer to authenticate with their API Provider while using a Third Party for Account Information Services, using the same web based authentication method which the Customer uses when accessing the API Provider web channel directly.

This model works when the Customer is consuming the Third Party service on a device that does not have the API Provider app, or the Customer does not have the API Provider mobile app.



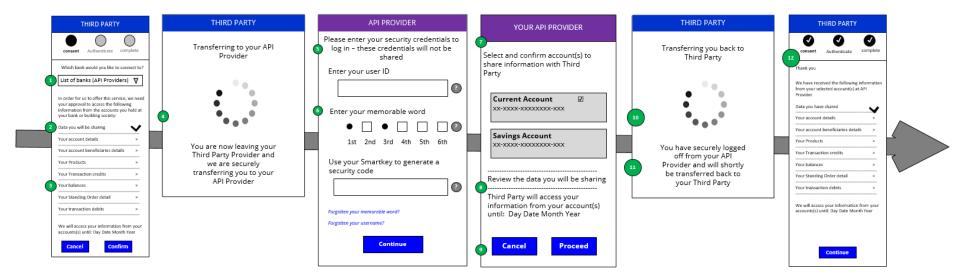
#### 3.2.1.2 Journey map

# **Browser Based Redirection - Account Information Services (AIS)**





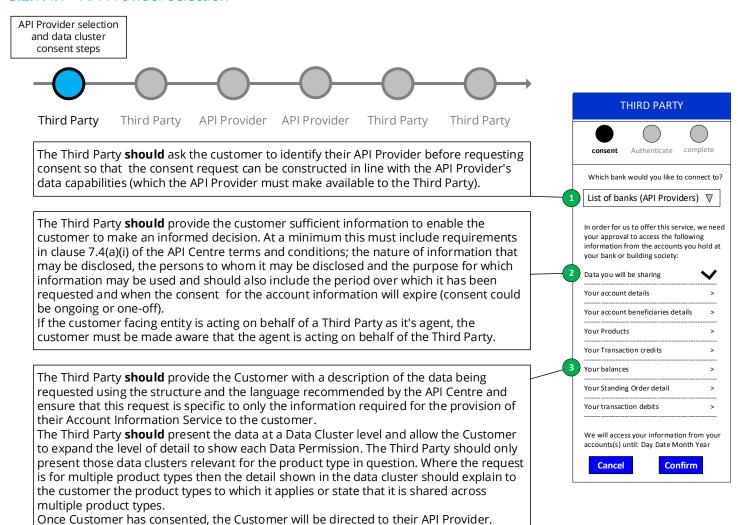
#### 3.2.1.3 Wireframe journey





#### 3.2.1.4 Wireframe annotations

#### 3.2.1.4.1 API Provider selection





#### 3.2.1.4.2 Third Party redirection

Third Party to API Provider Redirection screen



Third Party Third Party API Provider API Provider Third Party Third Party

The redirection **should** take the Customer to the API Provider web page (desktop/mobile) for authentication purposes only without introducing any additional screens.

The web based authentication **should** have no more than the number of steps that the Customer would experience when directly accessing the web based API Provider channel (desktop/mobile).

#### THIRD PARTY

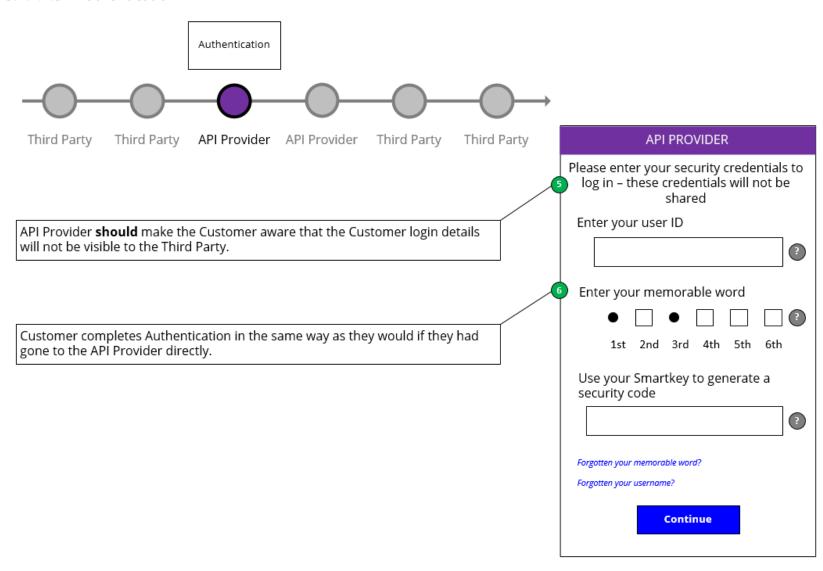
Transferring to your API
Provider



You are now leaving your Third Party Provider and we are securely transferring you to your API Provider

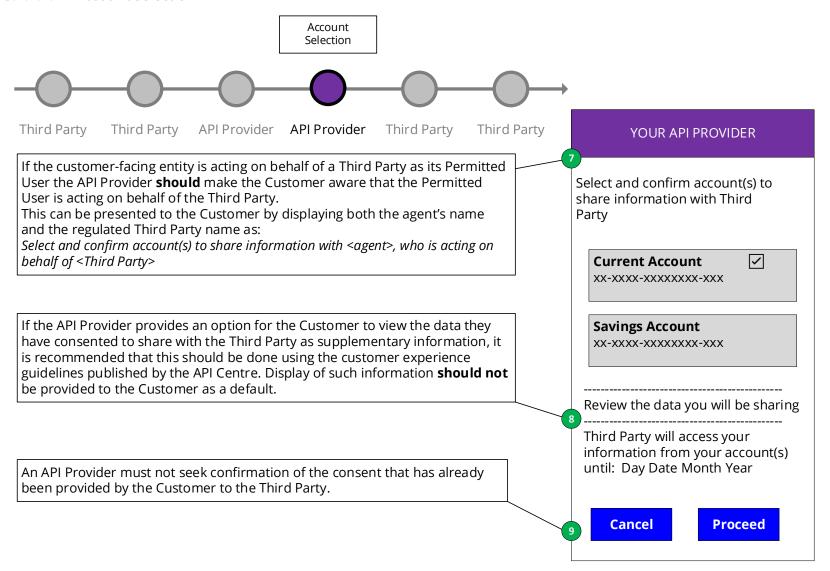


#### 3.2.1.4.3 Authentication



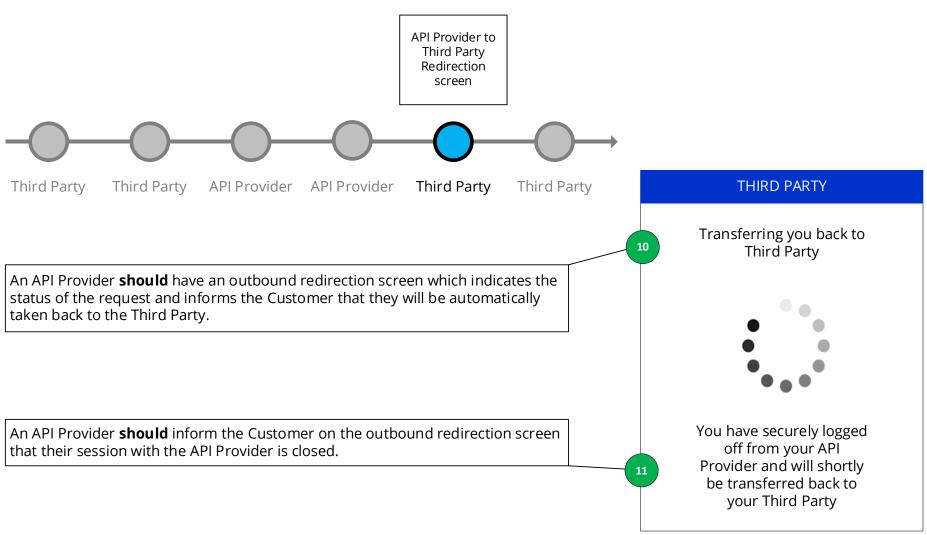


#### 3.2.1.4.4 Account selection



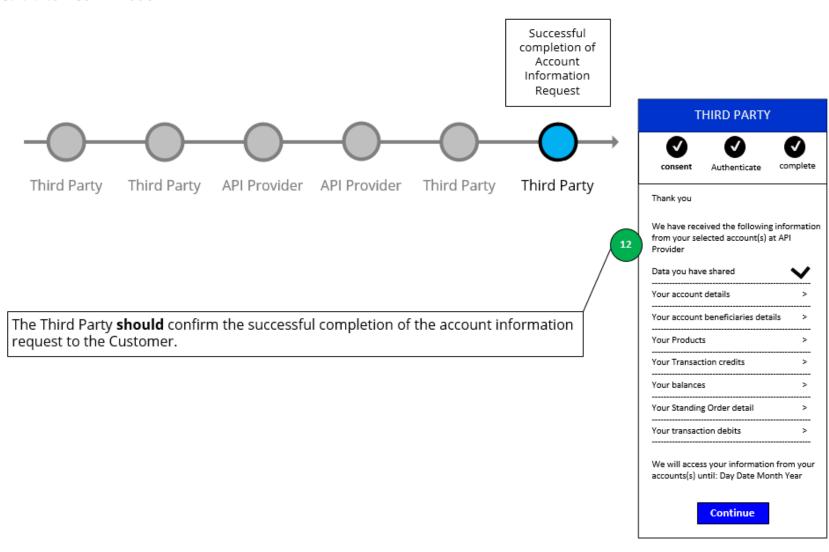


#### 3.2.1.4.5 API Provider redirection





#### 3.2.1.4.6 Confirmation





#### 3.2.2 Browser based redirection – Payment Initiation Services

#### 3.2.2.1 Journey description

Customer authentication with the API Provider using browser based redirection for a Payment Initiation Service request.

This enables a Customer to authenticate with their API Provider while using a Third Party for the Payment Initiation Service, using the same web based authentication method which they use when accessing the API Provider web channel directly.

This model works when the Customer is consuming the Third Party service on a device that does not have the API Provider app, or the Customer does not have the API Provider mobile app.

#### **Variations**

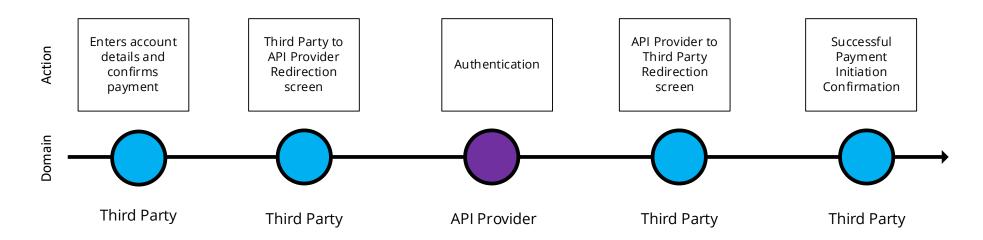
There are variations to this process. We have not shown the full journey breakdown for these variations but have listed them below (to be expanded upon as variations in use are identified):

1. The select account step (now as part of the first step – entering account details) could happen **after** the authentication step and will take place in the provider's environment instead of the Third Party environment.



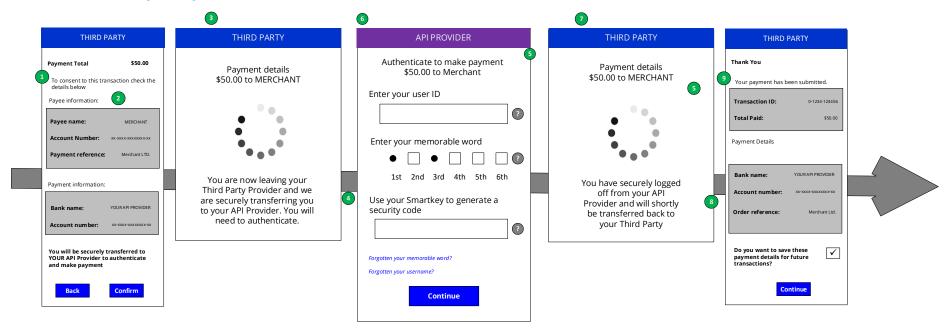
#### 3.2.2.2 Journey map

# **Browser Based Redirection – Payment Initiation Service (PIS)**





#### 3.2.2.3 Wireframe journey

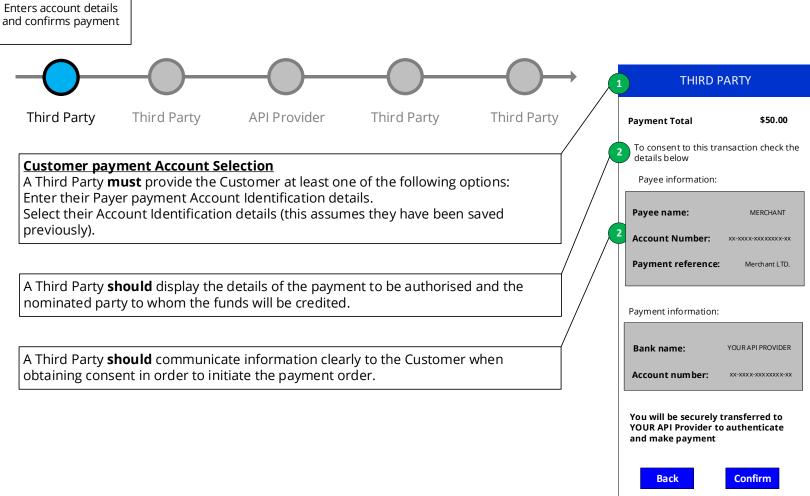




#### 3.2.2.4 Wireframe annotations

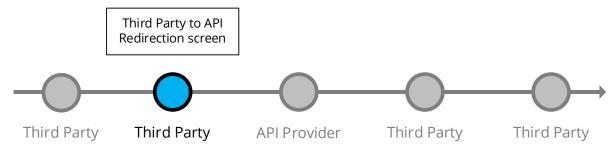
#### 3.2.2.4.1 API Provider selection

Enters account details





#### 3.2.2.4.2 Third Party redirection



A Third Party **should** make the Customer aware through an inbound redirection screen that they are being taken to their API Provider for authentication to complete the payment.

A Third Party **should** display in the Redirection screen the Payment Amount, Currency and the Payee Account Name to make the Customer aware of these details.

The redirection **must** take the Customer to an API Provider web page (desktop/mobile) for authentication purposes only without introducing any additional screens.

The web based authentication **should** have no more than the number of steps that the Customer would experience when directly accessing the web based API Provider channel (desktop/mobile).

#### THIRD PARTY

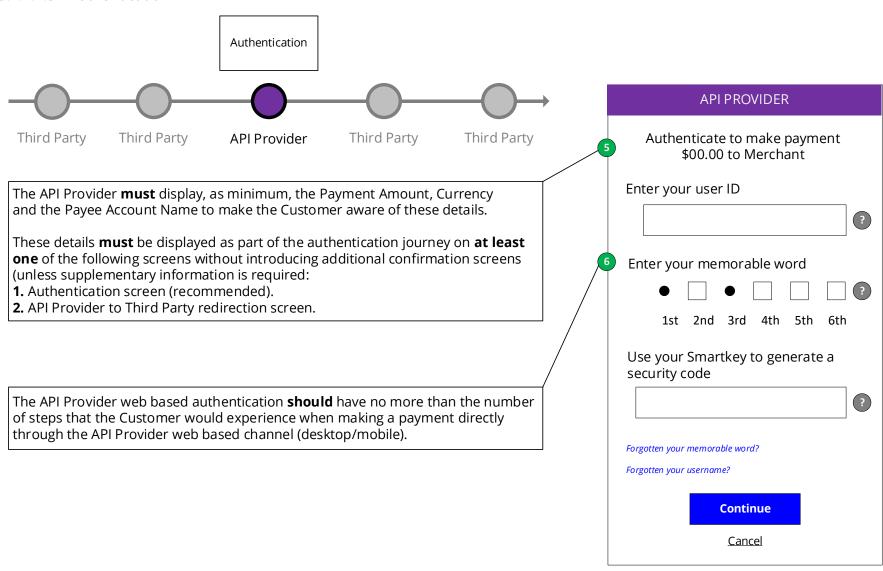
Payment details \$50.00 to MERCHANT



You are now leaving your Third Party Provider and we are securely transferring you to your API Provider. You may have to authenticate.

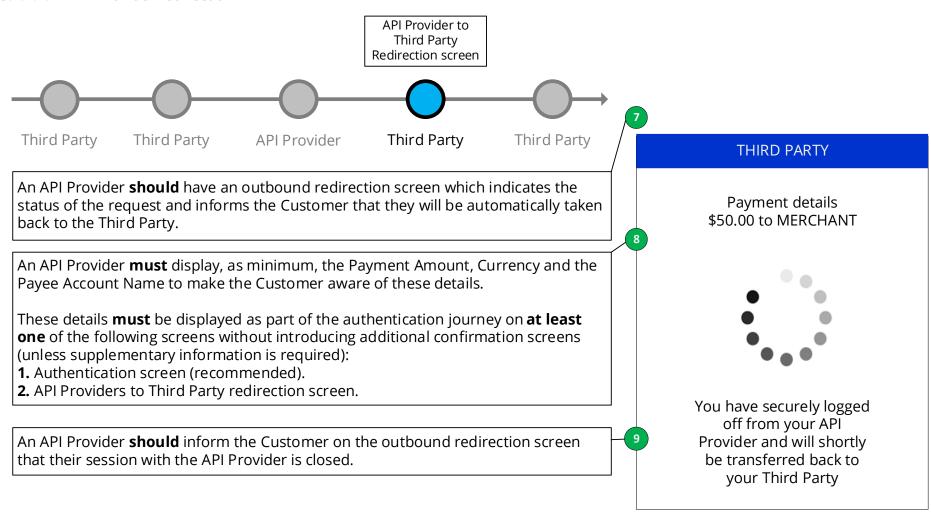


#### 3.2.2.4.3 Authentication





#### 3.2.2.4.4 API Provider redirection





#### 3.2.2.4.5 Confirmation

Successful Payment Initiation Confirmation **THIRD PARTY** Third Party Third Party Third Party Third Party **API Provider** Thank You Your payment has been submitted. Transaction ID: 0-1234-123456 The Customer **must** be redirected straight back to the Third Party website/app on **Total Paid:** \$50.00 the same device where Third Party displays confirmation of successful initiation. Payment Details YOUR API PROVIDER Bank name: Account number: xx-xxxx-xxxxxxxxxxxx Order reference: Merchant Ltd. Do you want to save these ✓ payment details for future transactions? Continue



#### 3.2.3 App based redirection – Account Information Services

#### 3.2.3.1 Journey description

Customer authentication with the API Provider using the API Provider mobile app installed on the same device on which the Customer is consuming the Third Party service.

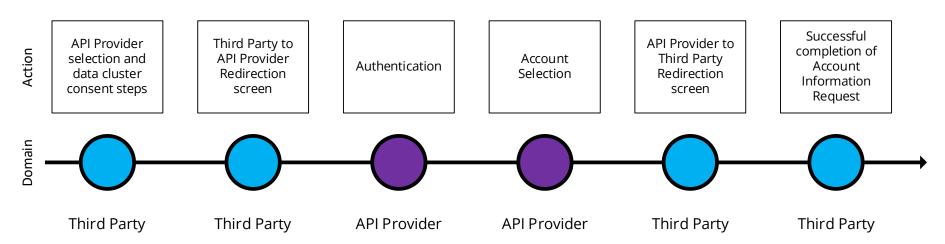
Enables the Customer to authenticate with the API Provider while using a Third Party for Account Information Services using the same API Provider app based authentication method which they use when accessing the API Provider mobile channel directly.

Third Party service could be web based or app based. The redirection should directly invoke the API Provider app to enable the Customer to authenticate and should not require the Customer to provide any Customer identifier or other credentials to the Third Party. Redirections can only be done on the same device.



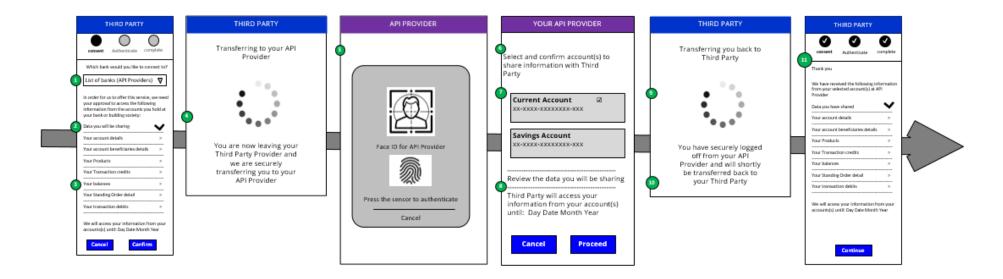
#### 3.2.3.2 Journey map

# **App Based Redirection – Account Information Services (AIS)**





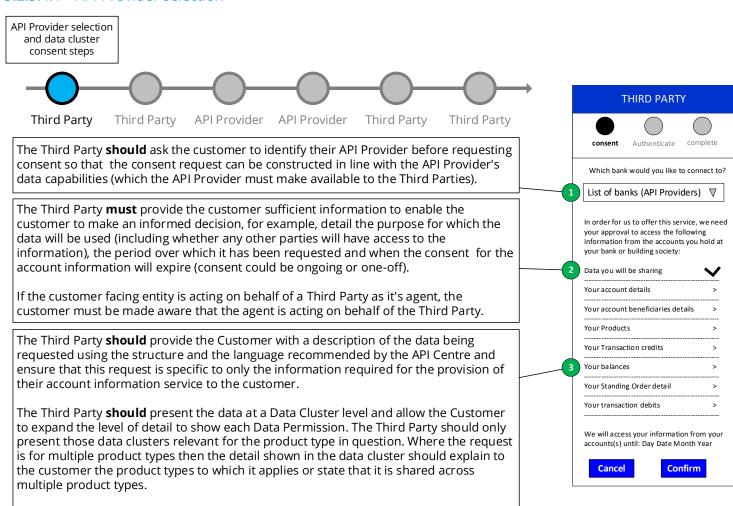
#### 3.2.3.3 Wireframe journey





#### 3.2.3.4 Wireframe annotations

#### 3.2.3.4.1 API Provider selection

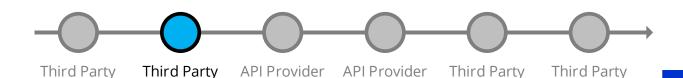


Once Customer has consented, the Customer will be directed to their API Provider.



#### 3.2.3.4.2 Third Party redirects to API Provider

Third Party to API Provider Redirection screen



The Third Party **should** make the Customer aware on the inbound redirection screen that they will be taken to their API Provider for authentication for account access.

If the Customer has an API Provider app installed on the same device the redirection **should** invoke the API Provider app for authentication purposes only without introducing any additional screens.

The API Provider app based authentication **should** have no more than the number of steps that the Customer would experience when directly accessing the API Provider mobile app(biometric, passcode, credentials) and offer the same authentication method(s) available to the Customer when authenticating with the API Provider direct channels.

#### THIRD PARTY

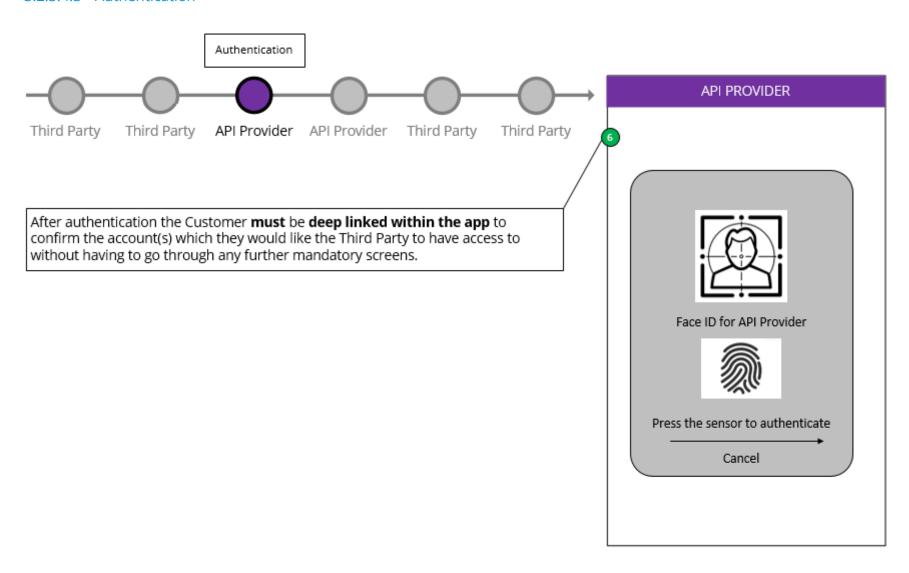
Transferring to your API
Provider



You are now leaving your Third Party Provider and we are securely transferring you to your API Provider

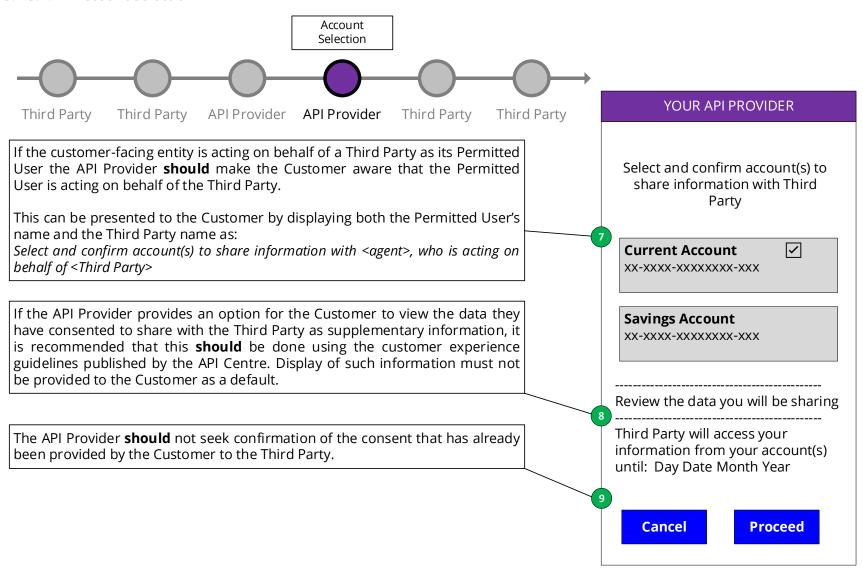


#### 3.2.3.4.3 Authentication



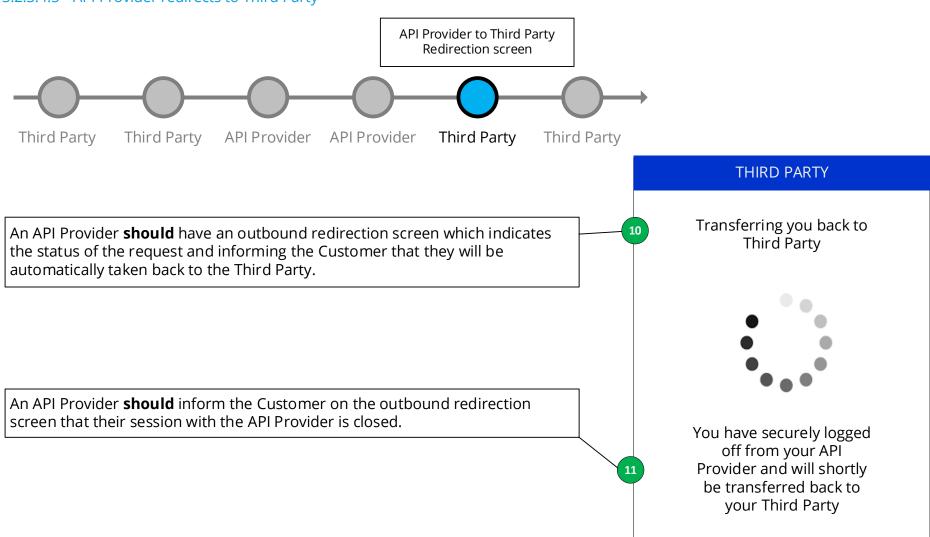


#### 3.2.3.4.4 Account selection



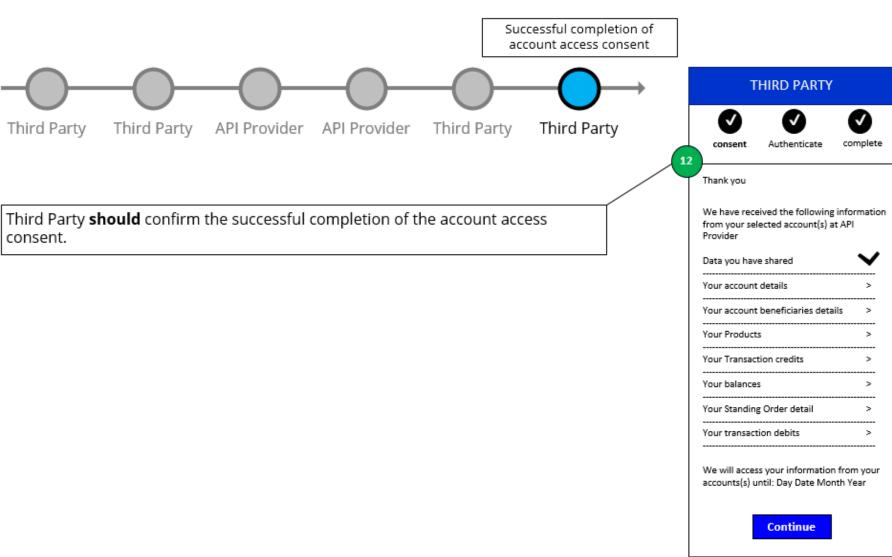


#### 3.2.3.4.5 API Provider redirects to Third Party





## 3.2.3.4.6 Third Party confirmation





## 3.2.4 App based redirection – Payment Initiation Services

#### 3.2.4.1 Journey description

Customer authentication, with the API Provider using the API Provider mobile app installed on the same device on which the Customer is consuming the Third Party service.

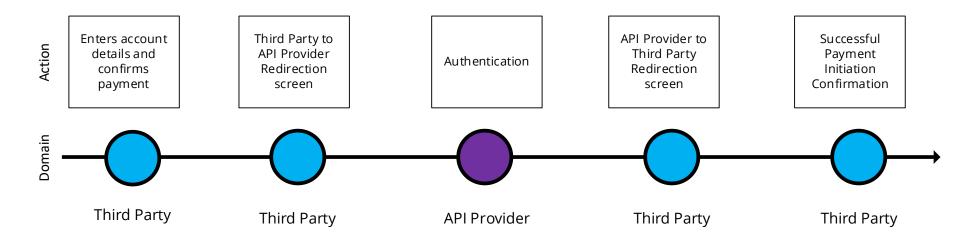
Enables the Customer to authenticate with the API Provider while using a Third Party for Payment Initiation Services, using the same API Provider app-based authentication method that they use when accessing the API Provider mobile channel directly.

The Third Party service could be web based or app based. The redirection should directly invoke the API Provider app to enable the Customer to authenticate and should not require the Customer to provide any Customer identifier or other credentials to the Third Party.



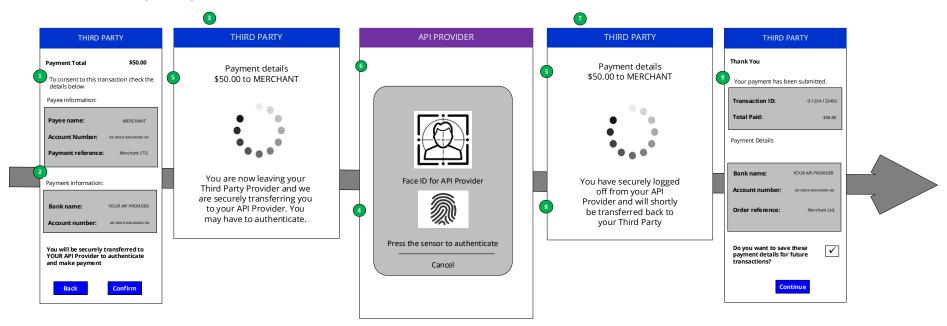
## 3.2.4.2 Journey map

# **App Based Redirection – Payment Initiation Service (PIS)**





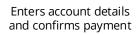
## 3.2.4.3 Wireframe journey



Consumer research carried out by OBIE has shown that people feel authentication via Fingerprint ID adds a reassuring sense of security to the journey.



#### 3.2.4.3.1 Customer payment account selection



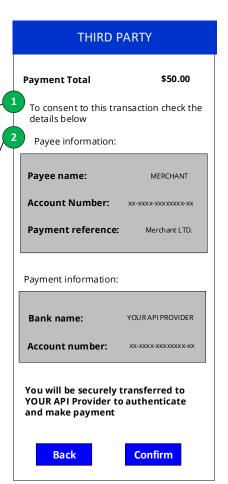


#### **Customer Payment Account Selection**

The Third Party **must** provide the Customer with at least one of the following options:

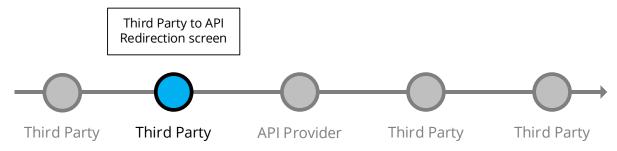
- Enter the Payer payment Account Identification details.
- Select their Account Identification details (this assumes they have been saved previously).

The Third Party **should** communicate information clearly to the Customer when obtaining consent in order to initiate the payment order.





#### 3.2.4.3.2 Third Party redirects to API Provider



The Third Party **should** make the Customer aware through an inbound redirection screen that they are being taken to their API Provider for authentication to complete the payment.

The Third Party **should** display in the Redirection screen the Payment Amount, Currency and the Payee Account Name to make the Customer aware of these details.

The redirection **should** take the Customer to an API Provider web page (desktop/mobile) for authentication purposes only without introducing any additional screens.

The web based authentication **should** have no more than the number of steps that the Customer would experience when directly accessing the web based API Provider channel (desktop/mobile).

#### THIRD PARTY

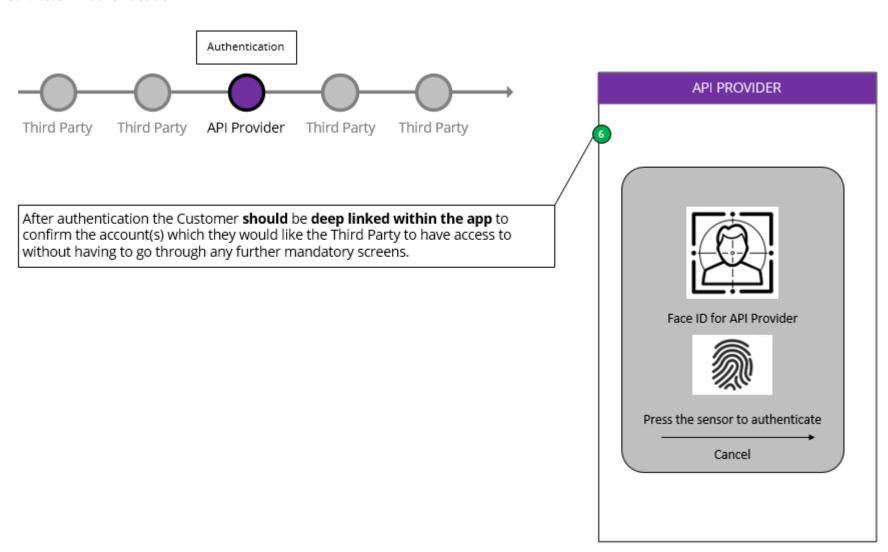
Payment details \$50.00 to MERCHANT



You are now leaving your Third Party Provider and we are securely transferring you to your API Provider. You may have to authenticate.

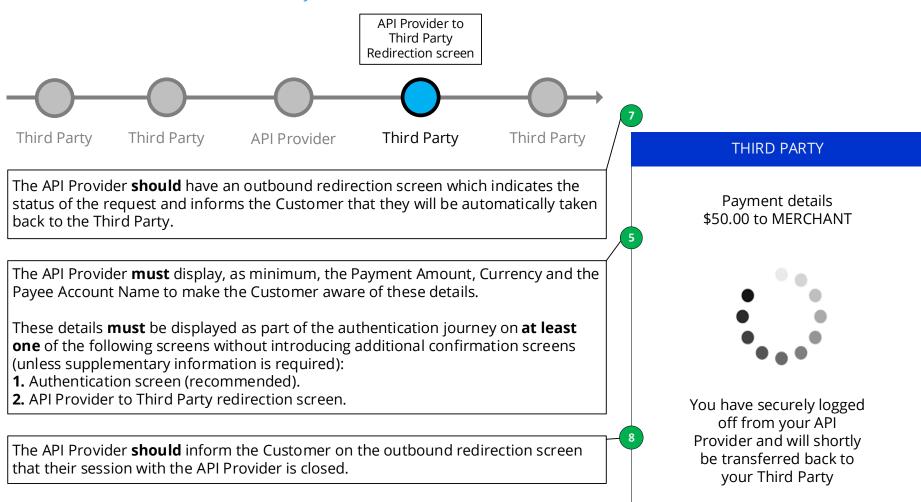


#### 3.2.4.3.3 Authentication





#### 3.2.4.3.4 API Provider redirects to Third Party





#### 3.2.4.3.5 Payment confirmation

Successful Payment Initiation Confirmation THIRD PARTY Third Party Third Party Third Party **Third Party API Provider** Thank You Your payment has been submitted. Transaction ID: 0-1234-123456 The Customer **must** be redirected straight back to the Third Party website/app on **Total Paid:** \$50.00 the same device where Third Party displays confirmation of successful initiation. Payment Details Bank name: YOUR API PROVIDER Account number: xx-xxxx-xxxxxxxxxxx Order reference: Merchant Ltd. Do you want to save these payment details for future **✓** transactions? **Continue** 



# 3.3 App-to-browser redirection – Account Information Services

It is possible that a Customer using a mobile device does not have their API Provider mobile app installed, or their API Provider does not provide an app at all. In these instances, the Third Party app will need to launch the native mobile browser in order to present the Customer with their API Provider's web channel to authenticate.

# 3.4 Browser-to-app redirection

Conversely, a Third Party may be browser only, but this should not preclude a Customer from having their API Provider app invoked if the Customer is using a mobile browser and has the API Provider app installed on their device. In this situation the Third Party browser should invoke the app for authentication and following authentication the Customer needs to be redirected back to the Third Party browser.

If a Customer is using a desktop to access the Third Party, then under the redirection model the journey will have to be completed on the API Provider browser channel. Only with "Decoupled authentication" (see 3.6) can the Customer use their app to authenticate in this situation.

## 3.5 Effective use of redirection screens

Within a typical journey, a Customer is presented with two redirection screens, at the Third Party first then followed by the API Provider:

- 1. First message that informs the Customer they are moving from the Third Party domain to the API Provider domain.
  - Happens after the Customer has provided consent to the Third Party for the account information or payment initiation service.
- 2. Second message that informs the Customer they are moving back from the API Provider domain to the Third Party domain.
  - Happens after the API Provider has authenticated the Customer and completed the authorisation of the action with the Customer.

Research carried out by OBIE has suggested that the redirection screens are an important part of the process, providing the Customer with trust in the process. The following reasons are noted:

- 1. Helps the Customer navigate their online journey by informing them of what is going to happen next.
- 2. Creates a clear sense of separation between the Third Party domain and the API Provider
- 3. Reassures the Customer that they are in control and helps engender trust.



# 3.6 Decoupled authentication

A major addition to the API Standards for v2.0.0, known as "Decoupled" authentication, allows for the flow to be completed with a Customer using a separate secondary device to authenticate with the API Provider.

To enable the flow the Customer uses a separate secondary device to authenticate with the API Provider. This model allows for a number of innovative solutions and has the added benefit of being able to take advantage of biometrics for Strong Customer Authentication (SCA), where they may be engaging with a Third Party through a separate device, such as a Point of Sale (POS) device.

We have used examples for a Payment Initiation Service journey, but the same principles apply for all Account Information Service journeys.

Under the Decoupled standard, the following Customer experiences are available:

#### 3.6.1 Model A: Static Customer identifier

#### 3.6.1.1 Journey description

A Decoupled authentication flow, where the Customer provides a static identifier to the Third Party which is used by the API Provider to notify the Customer, such that the Customer can authenticate using the API Provider app on a separate device or mobile application.

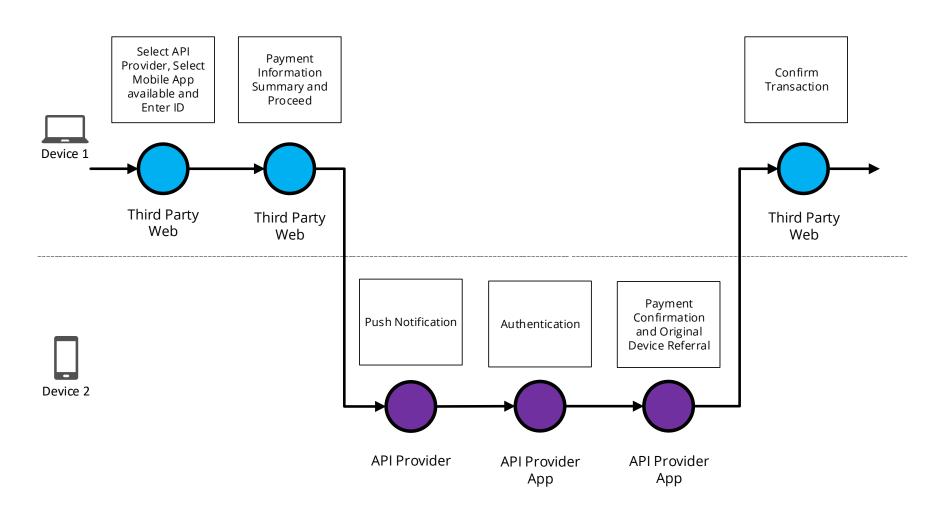
This enables the Customer to use the same app-based authentication method with the API Provider they use when accessing the API Provider mobile app directly.

This model is best suited to Third Party apps with good user input options (e.g. website on PC/laptop), using a supported identifier, for example Customer phone number, email address, debit card number. The exact type of identifier supported by the API Provider should be published by the API Provider.



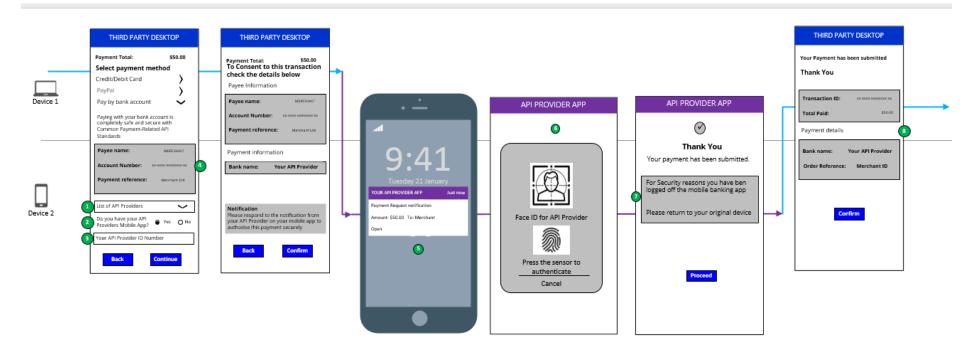
#### 3.6.1.2 Journey map

## **Model A: Static Customer Identifier**





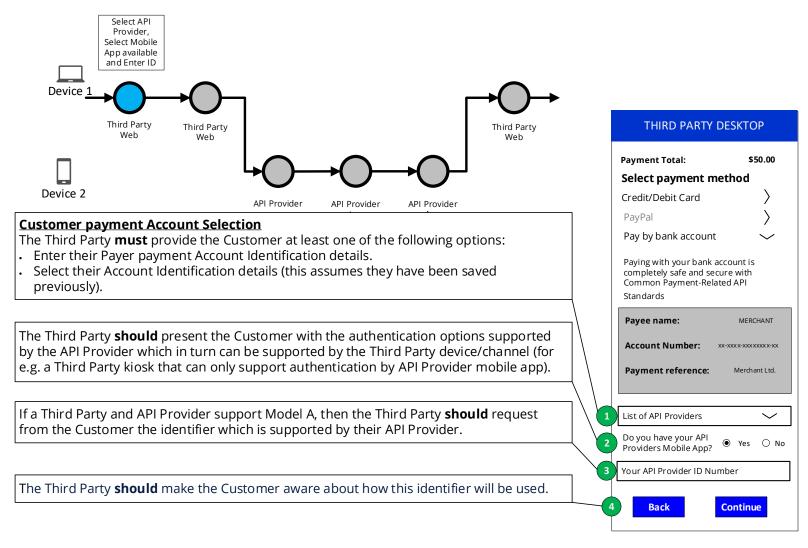
## 3.6.1.3 Wireframe journey





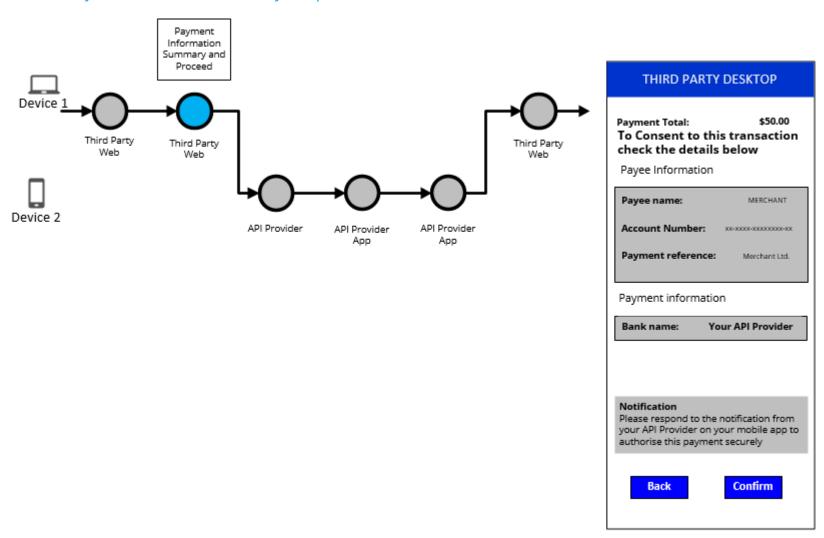
#### 3.6.1.4 Wireframe annotations

#### 3.6.1.4.1 Select API Provider



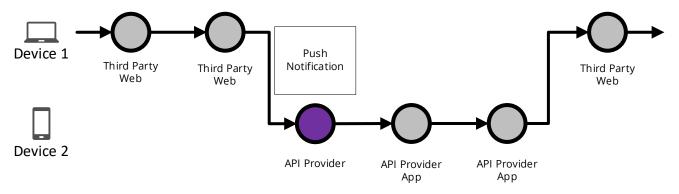


## 3.6.1.4.2 Payment information summary and proceed

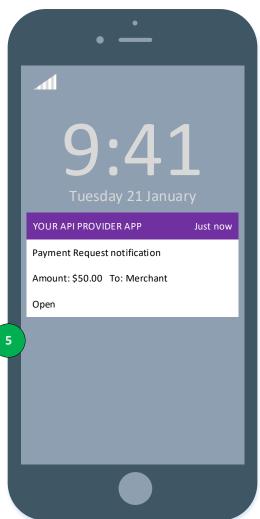




#### 3.6.1.4.3 Push notifications

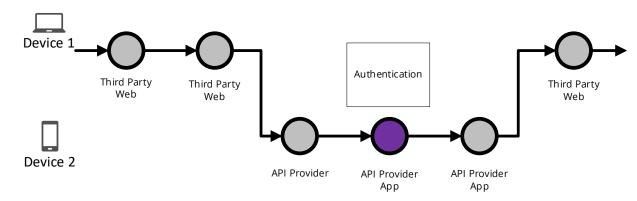


After the Customer enters the specified identifier, if the Customer has an API Provider app then the API Provider **must** notify the customer through the API provider app for authentication purposes, without introducing any additional screens. The notification **must** clearly mention the payment request with the amount and the payee

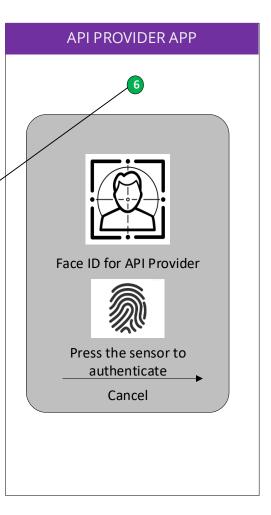




#### 3.6.1.4.4 Authentication

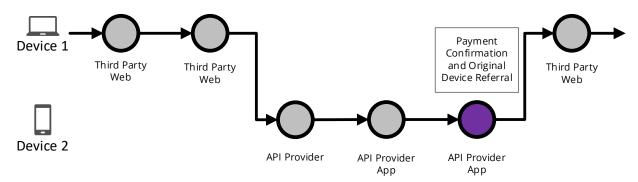


The API Provider app based authentication **should** have no more than the number of steps the Customer would experience when directly accessing the API Provider mobile app (biometric, passcode, credentials) and these screens **should** be the same steps where possible to do so.





## 3.6.1.4.5 Payment confirmation



If the Customer is logged off from the API Provider app, the API Provider **should** make the Customer aware that they have been logged off and notify them to check back on the originating Third Party app.

#### **API PROVIDER APP**



#### **Thank You**

Your payment has been submitted.

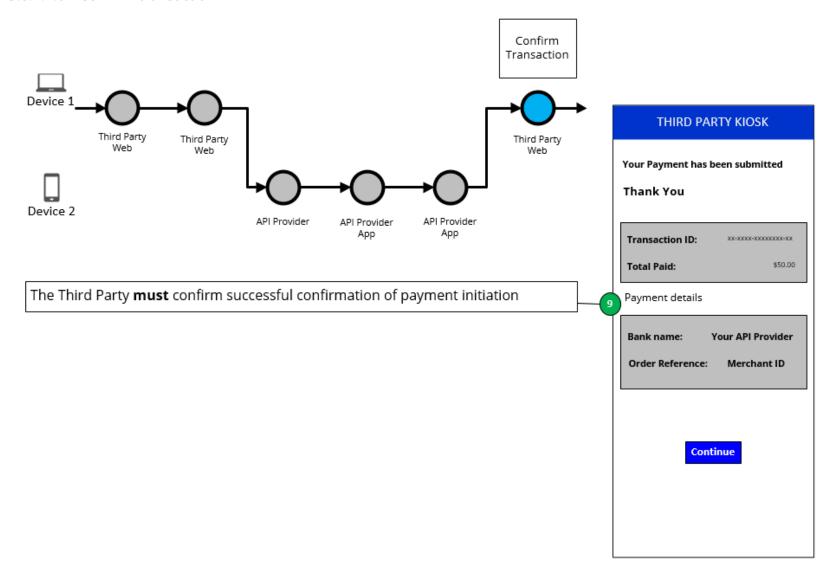
For Security reasons you have ben logged off the mobile banking app

Please return to your original device

Proceed



#### 3.6.1.4.6 Confirm transaction





## 3.6.2 Model B: API Provider generated identifier

#### 3.6.2.1 Journey description

A Decoupled authentication flow where the Customer provides a dynamic identifier generated with their API Provider to the Third Party which is then used by the API Provider to identify the Customer through the API Provider app to authenticate and action the Third Party request.

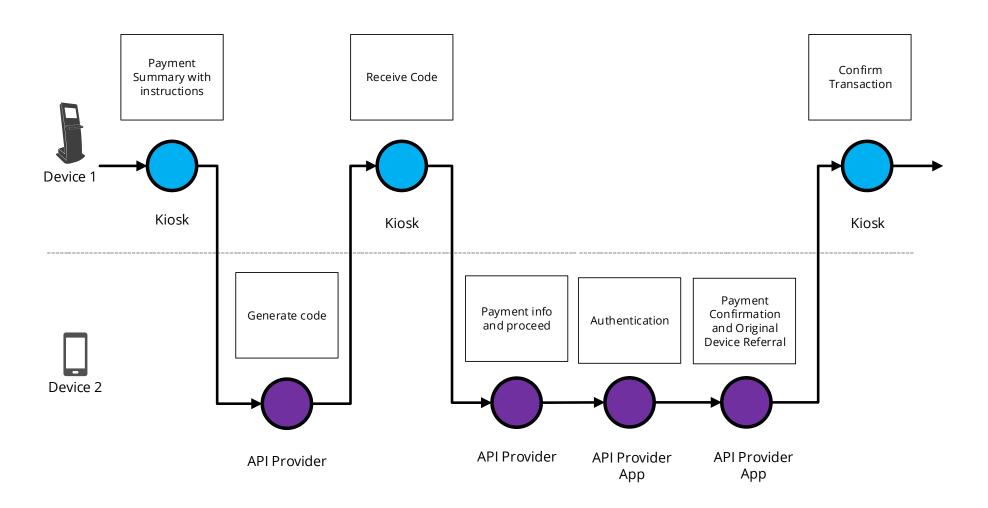
This model is best suited to a Third Party app that can "capture" the code from the API Provider app (e.g. by scanning a QR code).

Alternatively, the Customer can be prompted to type in an identifier in the Third Party App. This may however be a long series of characters and may result in a sub-optimal Customer experience.



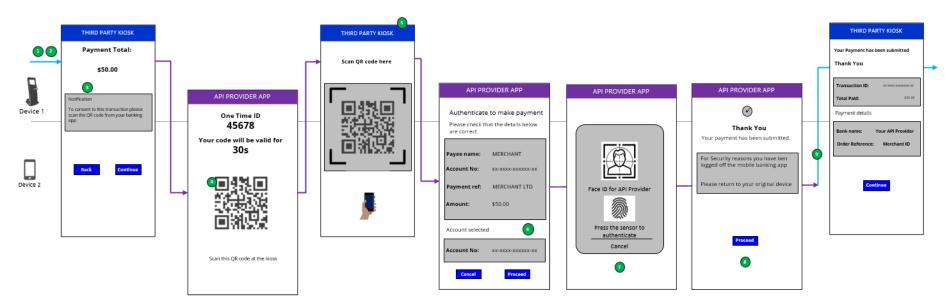
#### 3.6.2.2 Journey map

## **Model B: API Provider Generated Identifier**





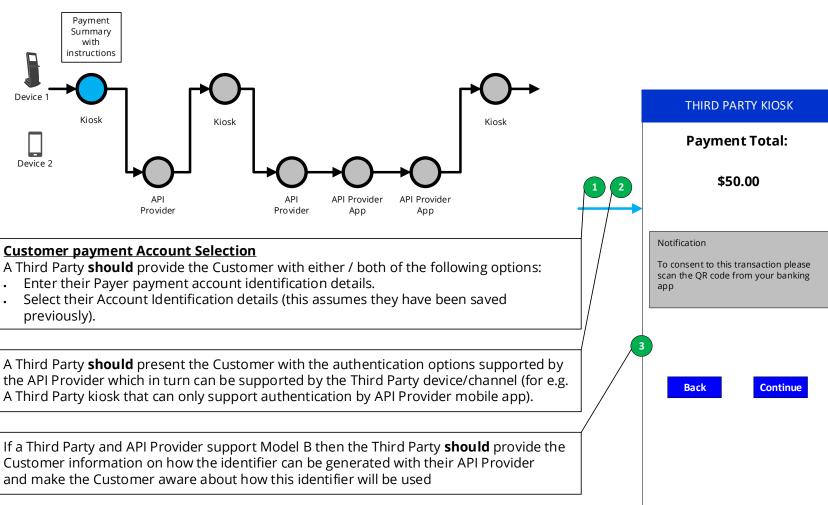
## 3.6.2.3 Wireframe journey





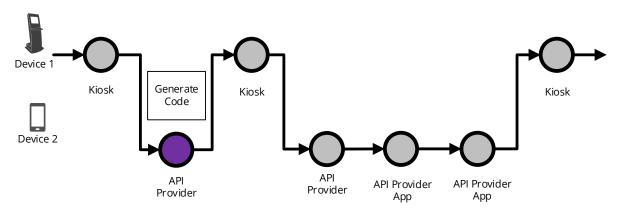
#### 3.6.2.4 Wireframe annotations

#### 3.6.2.4.1 Payment summary





#### 3.6.2.4.2 Generate code



The Third Party **should** make the Customer aware about how this identifier will be used.

#### API PROVIDER APP

One Time ID **45678** 

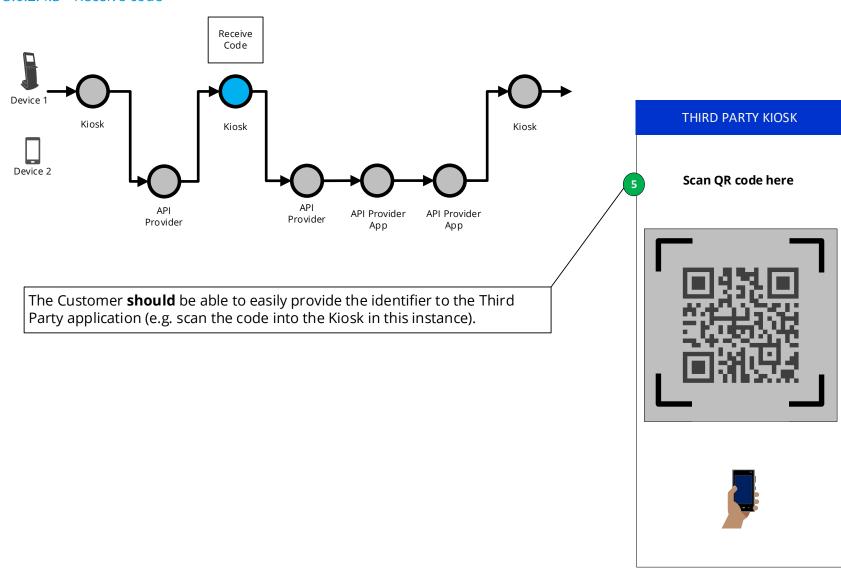
Your code will be valid for **30s** 



Scan this QR code at the kiosk

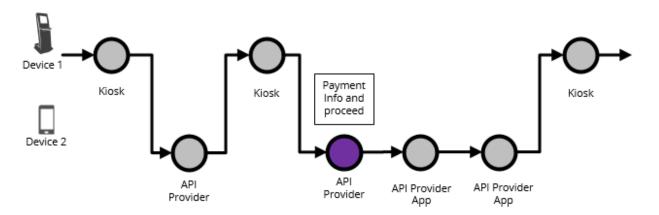


#### 3.6.2.4.3 Receive code

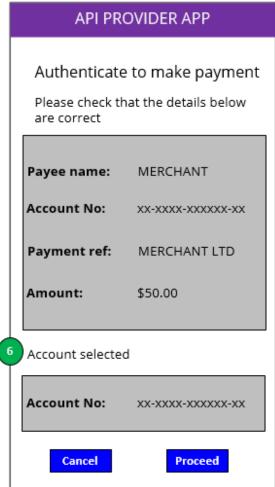




## 3.6.2.4.4 Payment information and proceed

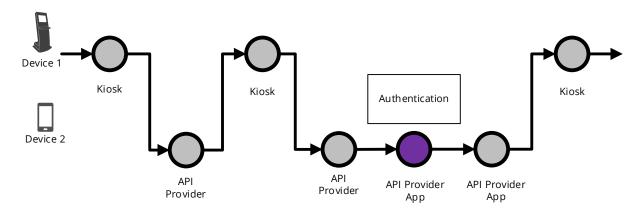


After the Customer provides the API Provider app generated identifier to the Third Party, then the API Provider **must** display the payment request within the same session of the API Provider app and clearly mention the amount and the payee.

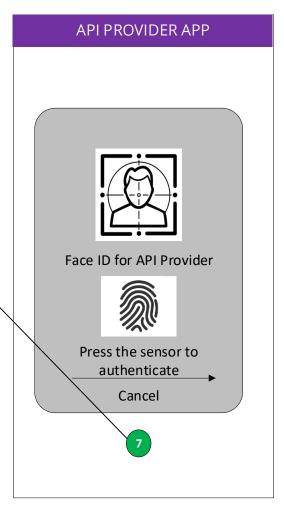




#### 3.6.2.4.5 Authentication

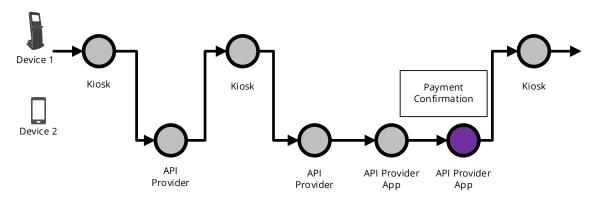


The API Provider **should** apply SCA which **should** have no more than the number of steps that the Customer would experience when directly accessing the API Providers mobile app (biometric, passcode, credentials).





## 3.6.2.4.6 Payment confirmation



An API Provider **must** make the customer aware that they have been logged off from the API Provider app and notify them to check back on the originating Third Party app.

#### API PROVIDER APP



#### **Thank You**

Your payment has been submitted.

For Security reasons you have ben logged off the mobile banking app

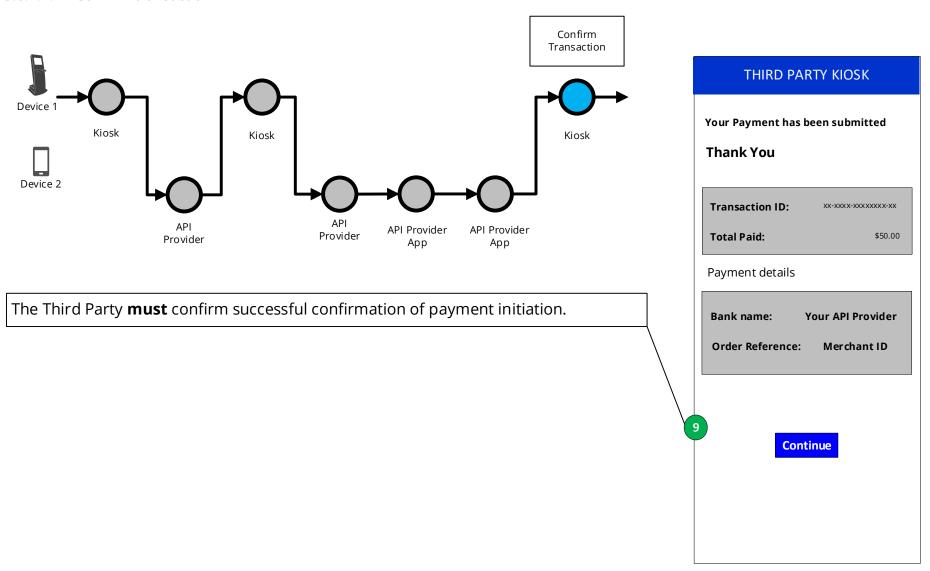
Please return to your original device

8

Proceed



#### 3.6.2.4.7 Confirm transaction





## 3.6.3 Model C: Third Party generated identifier

#### 3.6.3.1 Journey description

A Decoupled authentication flow where the Customer is provided with an identifier generated by the Third Party, which is then used by the API Provider to identify the Customer through the API Provider app to authenticate and action the Third Party request.

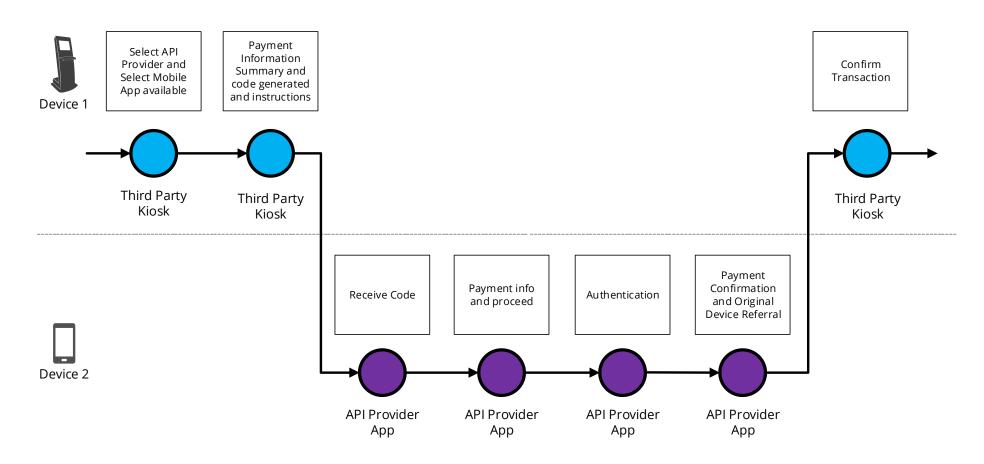
This model is best suited to a Third Party app that provides a QR code to all API Providers to "capture" the code from the API Provider app (e.g. by scanning a QR code).

Alternatively, the Customer can be prompted to type in an identifier in the API Provider app. This may be a long series of characters and may result in a sub-optimal Customer experience.



#### 3.6.3.2 Journey map

## **Model C: Third Party Generated Identifier**





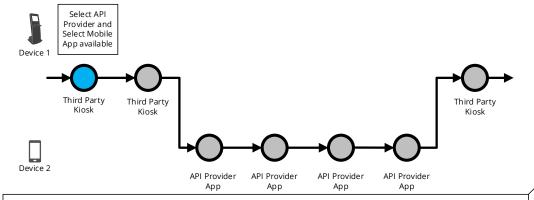
## 3.6.3.3 Wireframe journey





#### 3.6.3.4 Wireframe annotations

#### 3.6.3.4.1 Select API Provider



#### **Minimum Set of Parameters**

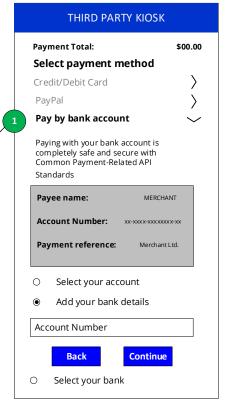
The Third Party **must** <u>either</u> allow the Customer to specify the below minimum set of parameters <u>or</u> pre-populate them for the Customer:

- Payment Amount and Currency.
- Payee Account Name.
- Payee Account Identification details (e.g. account number).
- Payment Reference This is optional but it is good practice to be populated for a payment.
- Any supplementary information required which the API Provider has published as required and is specific to that API Provider

#### **Customer Payment Account Selection**

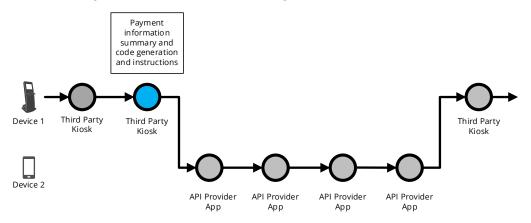
The Third Party **must** provide the Customer at least one of the following options:

- Enter their Payer payment Account Identification details.
- The Third Party must allow the Customer to enter their payment Account Identification details in at least one of the ways specified in the API Centre API Specifications (e.g. account number).
- Select their Account Identification details (this assumes they have been saved previously).
- Select their API Provider in order to select their Customer payment Account from there later on in the journey.



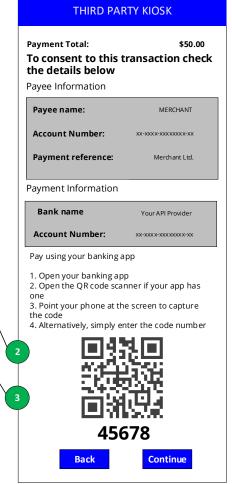


#### 3.6.3.4.2 Payment information summary



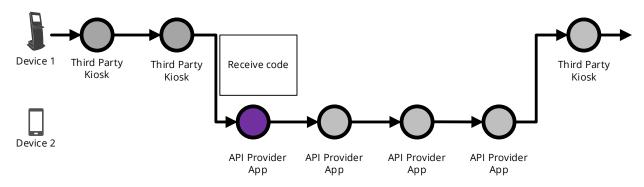
The Third Party **must** present the Customer with the authentication options supported by the API Provider which in turn can be supported by the Third Party device/channel (e.g. A Third Party kiosk that can only support authentication by an API Provider mobile app).

If a Third Party and API Provider support Model C then a Third Party **should** display an identifier generated from the API Provider to the Customer (e.g. QR code) and information on how the identifier should be used within the API Provider app (e.g. scan QR code with the API Provider app).

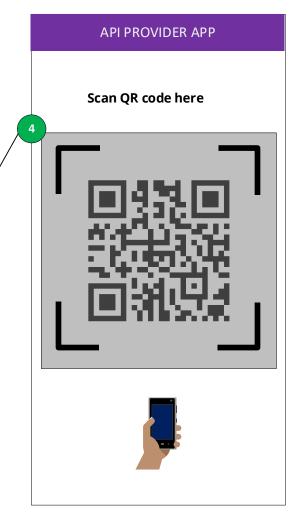




#### 3.6.3.4.3 Receive code

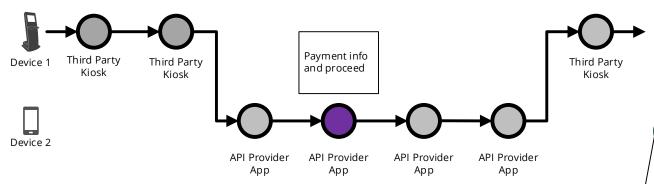


The Customer **should** be able to easily use the identifier presented by the Third Party application (e.g. scan the code from the Kiosk in this instance) without much friction (e.g of manually entering an alphanumeric code).

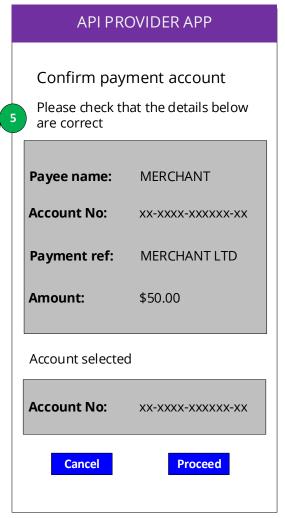




### 3.6.3.4.4 Payment information and proceed

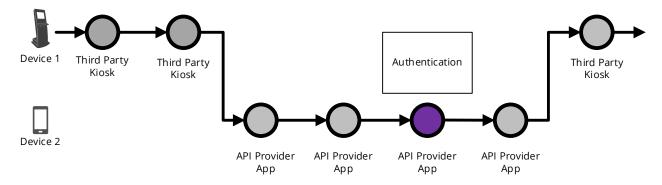


After the Customer the scans identifier from the Third Party within the API Provider app, then the API Provider **must** display the payment request and clearly mention the amount and the payee and payment account.



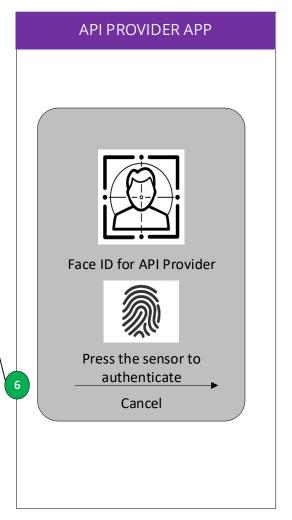


#### 3.6.3.4.5 Authentication



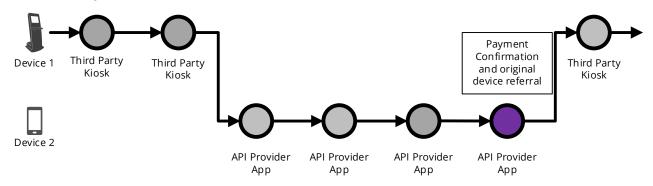
API Provider performs Secure Customer Authentication.

The API Provider app based authentication **should** have no more than the number of steps that the Customer would experience when directly accessing the API Provider mobile app (biometric, passcode, credentials)





#### 3.6.3.4.6 Payment confirmation



An API Provider **should** make the Customer aware that they have been logged off from the API Provider app and notify them to check back on the originating Third Party app

#### API PROVIDER APP



#### **Thank You**

Your payment has been submitted.

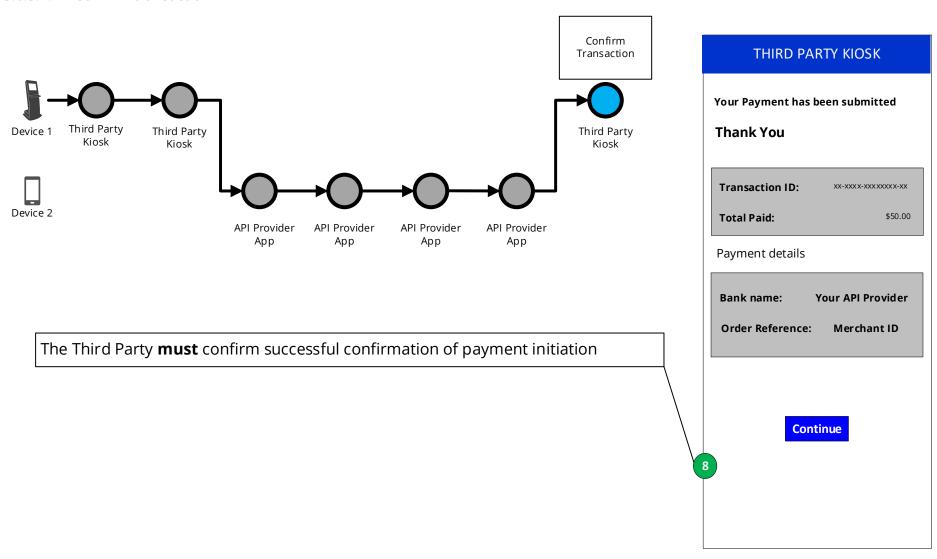
For Security reasons you have ben logged off the mobile banking app

Please return to your original device

Proceed



#### 3.6.3.4.7 Confirm transaction





# 3.6.4 Model D: Customer with a previously generated ID token

#### 3.6.4.1 Journey description

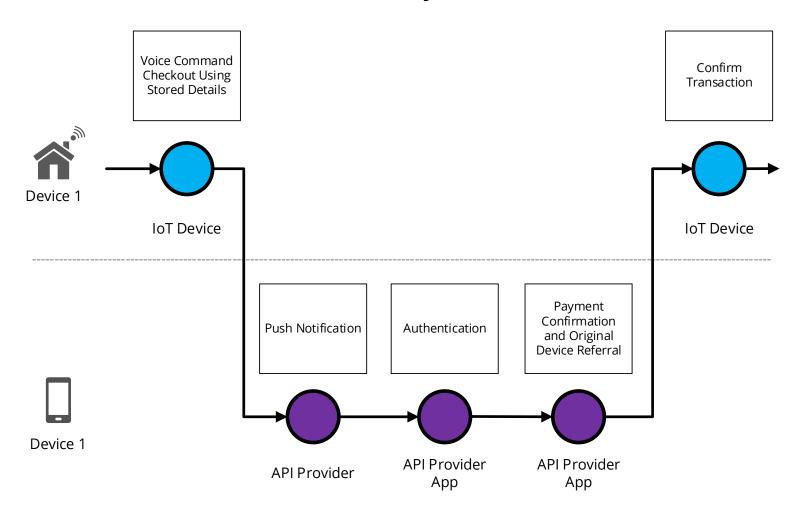
A Decoupled authentication flow where the Third Party provides the API Provider with an ID Token, generated by the API Provider from a previous consent authentication event. This is used by the API Provider to re-identify the Customer for a new authentication and authorisation event.

This model is ideally suited where the services offered by the Third Party involve POS, telephony, or where Customer interaction with the Third Party is not possible through a graphical interface (IoT devices), or even when the Customer may not be present within the Third Party channel.



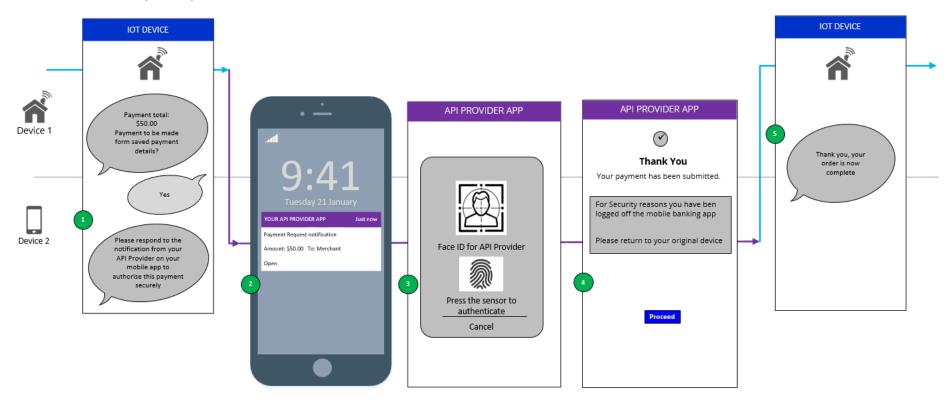
## 3.6.4.2 Journey map

# Model D: Customer with a Third Party account





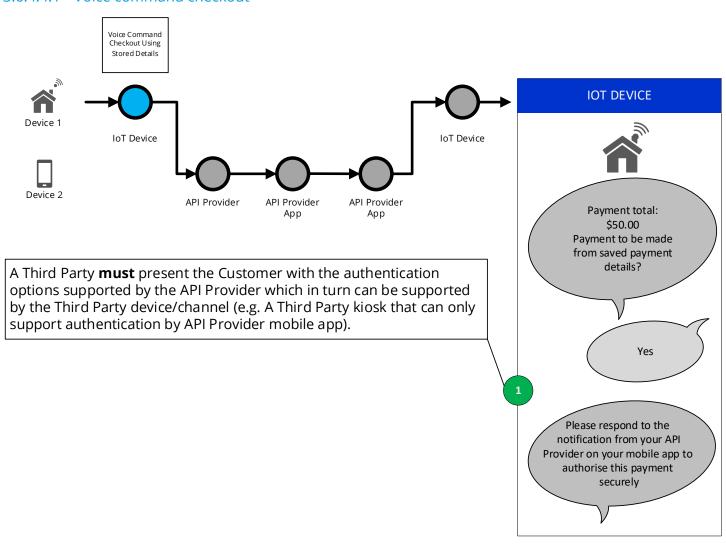
# 3.6.4.3 Wireframe journey





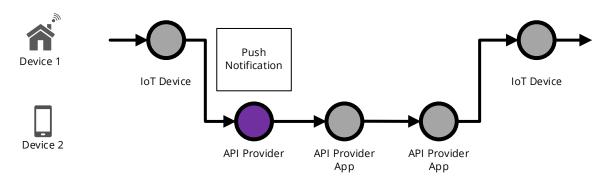
#### 3.6.4.4 Wireframe annotations

#### 3.6.4.4.1 Voice command checkout

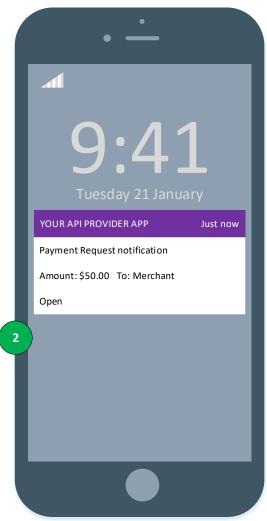




#### 3.6.4.4.2 Push notification

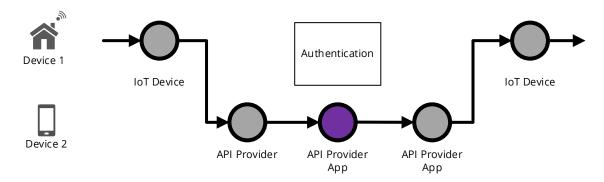


An API Provider **must** notify the Customer through the API Provider app for authentication purposes only without introducing any additional screens above what a Customer would experience through existing online channels. The notification **must** clearly mention the payment request with the amount and the payee.

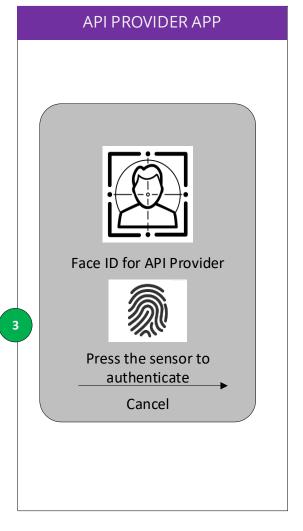




#### 3.6.4.4.3 Authentication

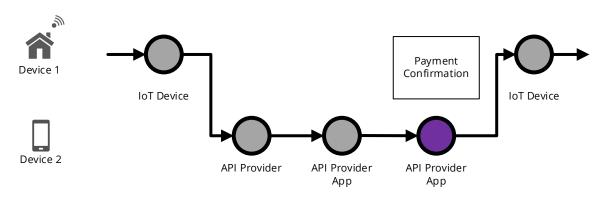


An API Provider app based authentication **should** have no more than the number of steps that the Customer would experience when directly accessing the API Provider mobile app (biometric, passcode, credentials).





#### 3.6.4.4.4 Payment confirmation



An API Provider **should** make the Customer aware that they have been logged off from the API Provider app and notify them to check back on the originating Third Party app.

#### API PROVIDER APP



#### **Thank You**

Your payment has been submitted.

For Security reasons you have ben logged off the mobile banking app

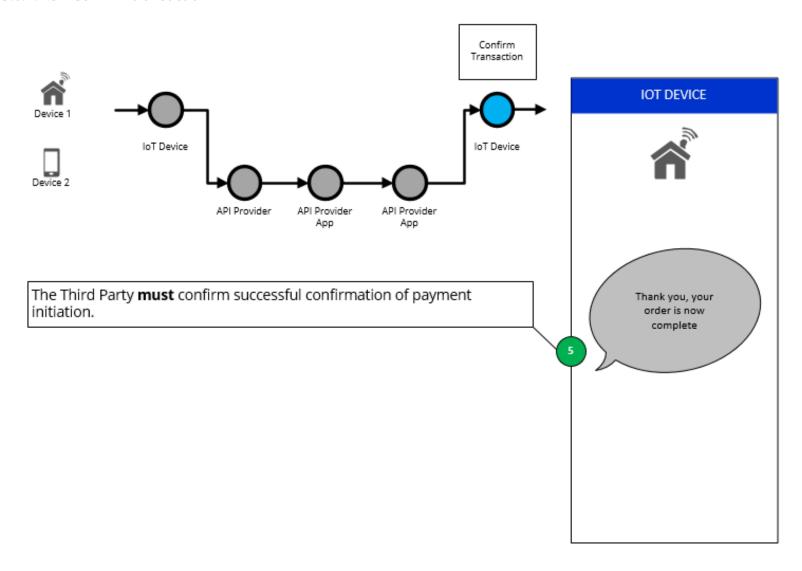
Please return to your original device

4

Proceed



#### 3.6.4.4.5 Confirm transaction





# 4 Account Information Services (AIS)

One of the primary aims of the Guidelines is to provide simplification and consistency throughout each stage of API Standards implementation. Therefore, we have defined a core set of Account Information Services journeys to illustrate the roles played by each party in the the API Standards ecosystem.

The API Standards support Account Information Services. They enable a Third Party to access account information from accounts held at API Providers and to provide account information services to a Customer, provided they have obtained the Customer's explicit consent.

This section describes the core journeys that support the set-up and management of Account Information Services. The key components are:

- Account Information Consent A Customer giving consent to a Third Party to request account information from their API Provider.
- Consent Dashboard and Revocation Third Party facility to enable a Customer to view and revoke consents given to that Third Party.
- Access Dashboard and Revocation API Provider facility to enable a Customer to view all
  Third Parties that have access to their account(s) and the ability to revoke that access.
  This should be available on those channels that the Customer uses to manage their
  accounts with the API Provider and be easy and intuitive for the Customer to find and
  use.
  - This facility should not include unnecessary steps, superfluous information or language which could discourage the use of Third Party services or divert the Customer from the access management process.
- Generic guidance around the effective use of re-direction screens (when the Customer is transferred to and from the API Provider's domain).

**NOTE**: Limitations of Account Information Services Access for Customers acting with delegated user authority on behalf of Corporate Entities will only be able to use Third Party services, if this is permitted within the parameters of that delegated user authority.

# 4.1 Account Information Services core journeys

#### 4.1.1 Account information consent

#### 4.1.1.1 Journey description

In this journey:

• The Third Party presents a description of the service that it is providing and the data that it requires in order to support its service proposition.

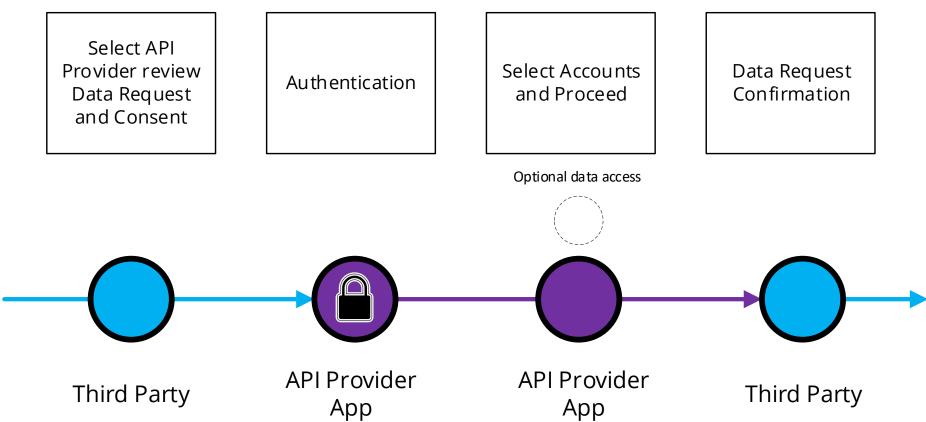


- The Customer selects the API Provider(s) where their payment account(s) is held.
- The Customer is then directed to the domain of their API Provider(s) for authentication and to select the account(s) they want to give access to.
- Once the Customer has been authenticated, their API Provider will be able to respond to the Third Party's request by providing the account information that has been requested.

**NOTE**: When considering Third Party requests submitted by a Customer acting with delegated user authority on behalf of a corporate entity, the Customer may only be able to use Third Party services if this is permitted within the parameters of that delegated user authority.

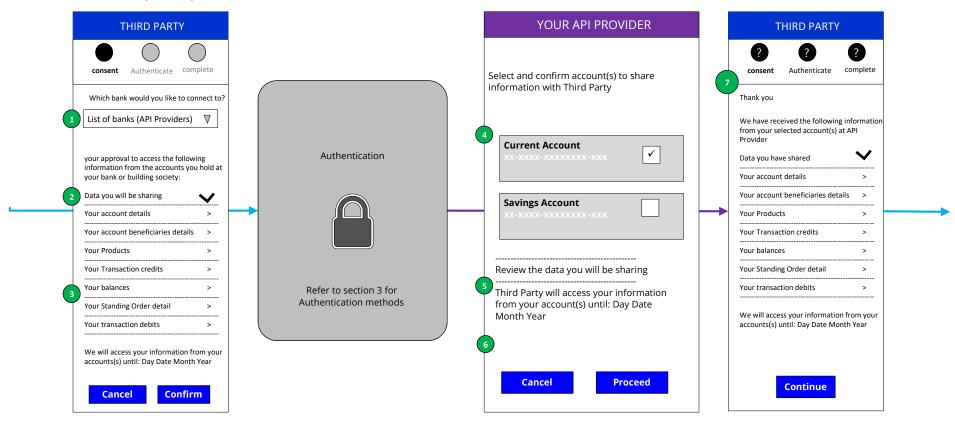


## 4.1.1.2 Journey map





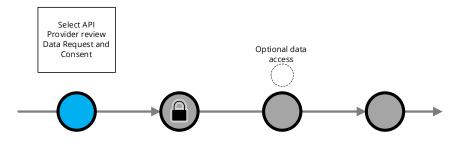
# 4.1.1.3 Wireframe journey





#### 4.1.1.4 Wireframe annotations

#### 4.1.1.4.1 Select API Provider



A Third Party **should** ask the Customer to identify their API Provider before requesting consent so that the consent request can be constructed in line with the API Provider data capabilities (which the API Provider must make available to the Third Party).

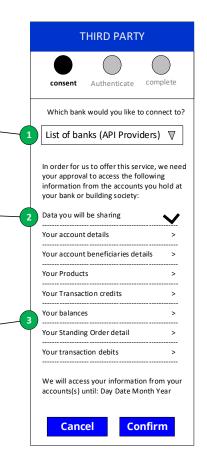
A Third Party **must** provide the Customer with sufficient information to enable the customer to make an informed decision, for example, detail the purpose for which the data will be used (including whether any other parties will have access to the information) the period over which it has been requested and when the consent for the account information will expire (consent could be on-going or one-off).

If the customer-facing entity is acting on behalf of a Third Party as its Permitted User, the Customer **must** be made aware that the Permitted User is acting on behalf of the Third Party.

The Third Party **should** provide the Customer with a description of the data being requested using the structure and language recommended and ensure that this request is specific to only the information required for the provision of their account information service to the Customer.

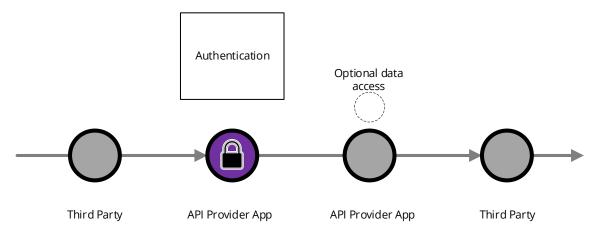
The Third Party **should** present the data at a Data Cluster level and allow the Customer to expand the level of detail to show each Data Permission. The Third Party should only present those data clusters relevant for the product type in question. Where the request is for multiple product types then the detail shown in the data cluster should explain to the Customer the product types to which it applies or state that it is shared across multiple product types.

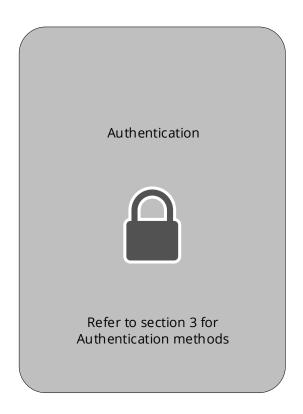
Once the Customer has consented, the Customer will be directed to their API Provider.





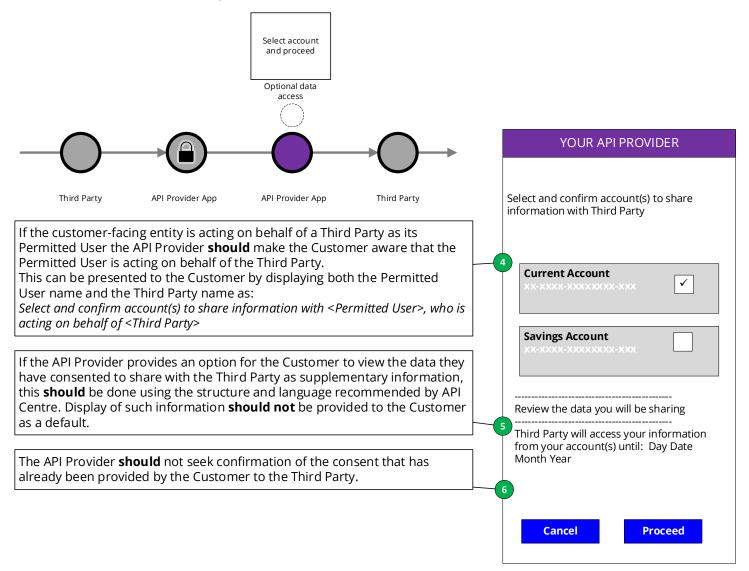
#### 4.1.1.4.2 Authentication





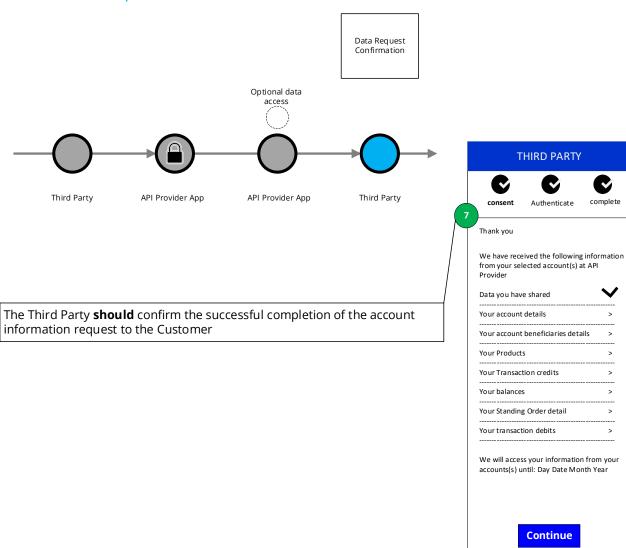


#### 4.1.1.4.3 Select accounts and proceed





#### 4.1.1.4.4 Data request confirmation





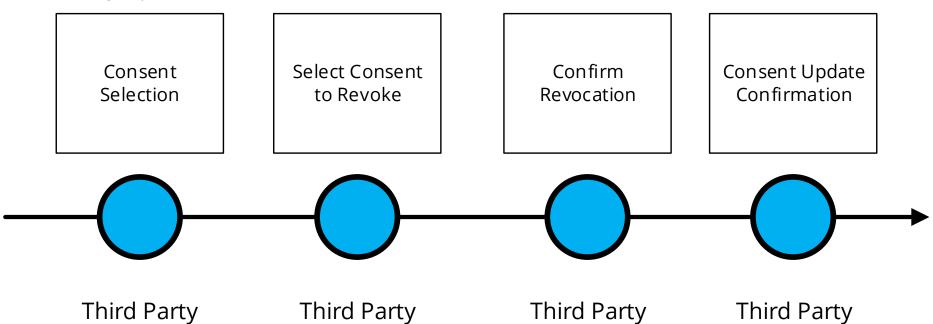
#### 4.1.2 Consent dashboard and revocation

#### 4.1.2.1 Journey description

Third Parties provide Customers with a facility to view and revoke on-going consents that they have given to that API Provider. Additionally, they may have consented to share data from several API Providers with a single Third Party. This section describes how these consents should be displayed and how the Customer journey to revoke them should be constructed.

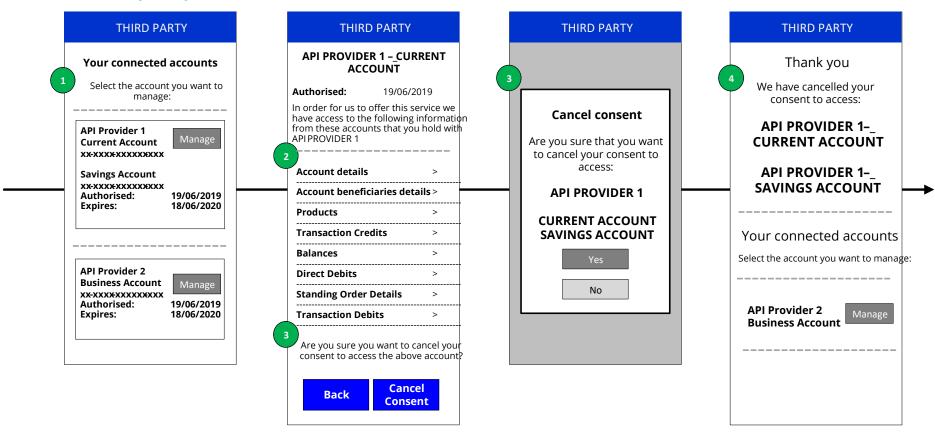


#### 4.1.2.2 Journey map





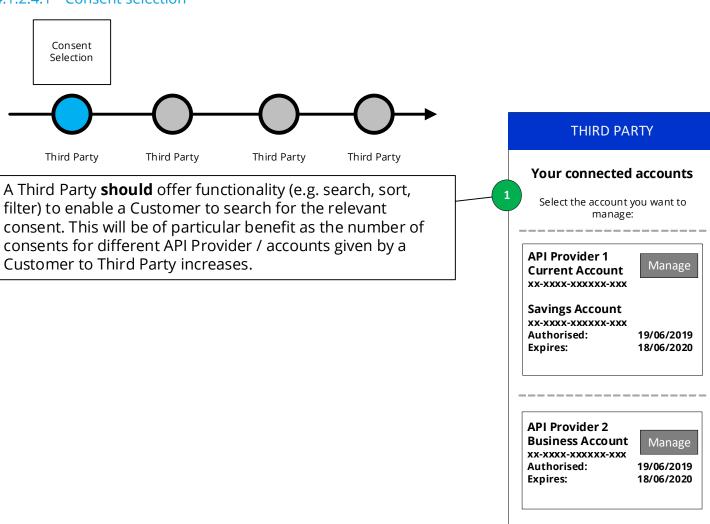
#### 4.1.2.3 Wireframe journey





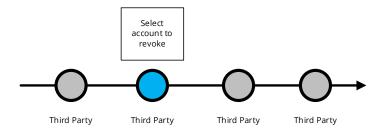
#### 4.1.2.4 Wireframe annotations

#### 4.1.2.4.1 Consent selection





#### 4.1.2.4.2 Select consent to revoke



A Third Party **should** describe the data being shared through each consent using the structure and language recommended by the API Centre and ensure this request is specific to only the information required for the provision of their account information service to the Customer.

A Third Party **should** present the data at a Data Cluster level and allow the Customer to expand the level of detail to show each Data Permission.

The Consent Dashboard should also describe:

- The purpose of the data request (including whether any other parties will have access to the information). Where the request is for multiple product types, the detail should explain to the customer the product type to which it applies or state that it is shared across multiple product types.
- If relevant, the length of time for which this consent is valid (e.g. one off use, for a set period of time e.g. one year, or with no end date).
- The period for which the transaction data has been requested (e.g. transactions for the last 12 months).
- When the Third Party access to the data will expire.
- The date the consent was granted.
- If the customer-facing entity is acting on behalf of a Third Party as its agent, the Customer must be made aware that the agent is acting on behalf of the Third Party.

The consent dashboard **should** allow a Customer to view or cancel the access they have given consent to. These functions "cancel access" and "back" **should** be displayed with equal prominence to the Customer.

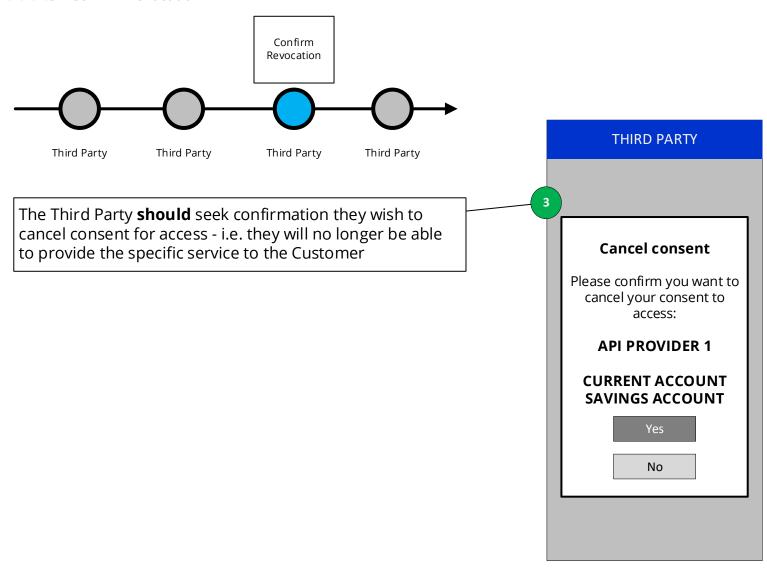
"Permitted User" means a person or entity who acts on behalf of an authorised payment institution or a small payment institution in the provision of payment services including account information services.

The Third Party **should** make the exact consequences of cancelling the consent clear to the Customer i.e. they will no longer be able to provide the specific service to the Customer



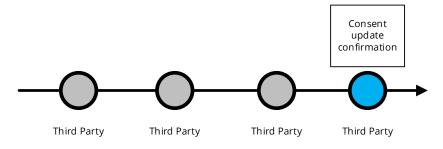


#### 4.1.2.4.3 Confirm revocation





#### 4.1.2.4.4 Consent update confirmation



The Third Party **must** inform the API Provider that the Customer has withdrawn consent by making a call to DELETE the account-access-consent resource as soon as practically possible. This will ensure that no further account information is shared.

The API Provider **must** support the Delete process. (This is not visible to the Customer but will ensure no further account information is provided by the API Provider to the Third Party).

# THIRD PARTY Thank you We have cancelled your consent to access: **API PROVIDER 1 -CURRENT ACCOUNT API PROVIDER 1 -SAVINGS ACCOUNT** Your connected accounts Select the account you want to manage: **API Provider 2 Business Account**



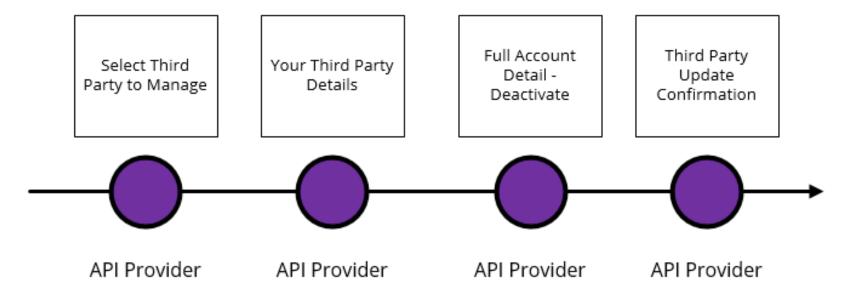
### 4.1.3 Access dashboard and revocation

#### 4.1.3.1 Journey description

API Providers should provide Customers with a facility to view and revoke on-going access that they have given to any Third Parties for each account held at that API Providers. This section describes how Third Party access should be displayed and how the Customer journey to revoke it should be constructed.

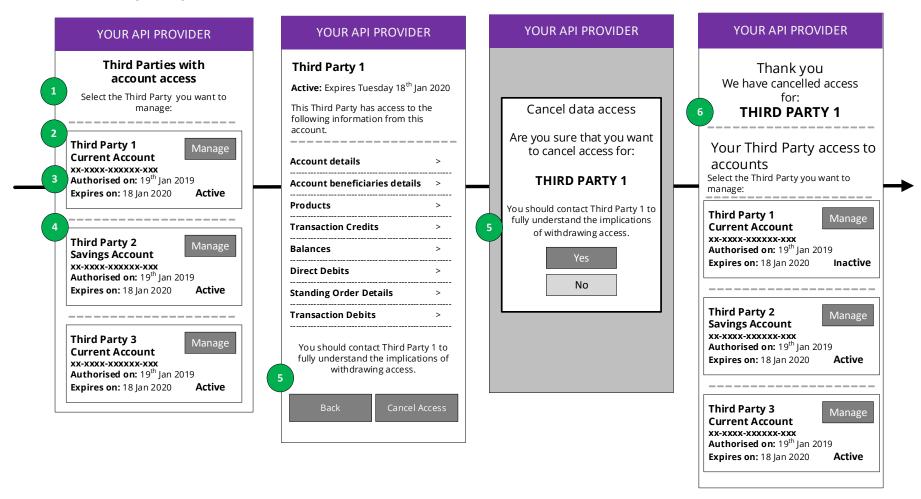


#### 4.1.3.2 Journey map





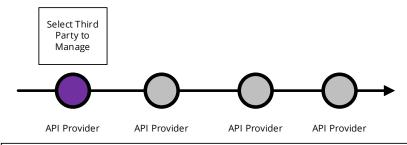
#### 4.1.3.3 Wireframe journey





#### 4.1.3.4 Wireframe annotations

#### 4.1.3.4.1 Select Third Party to manage



If the customer-facing entity is acting on behalf of a Third Party as its Permitted User, the Customer **should** be made aware that the Permitted User is acting on behalf of the Third Party.

This can be presented to the Customer by displaying both the Permitted User name and the Third Party name in the list of service providers, where applicable.

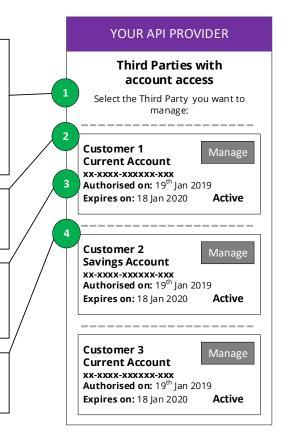
"Permitted User" means a person or entity who acts on behalf of an authorised payment institution or a small payment institution in the provision of payment services including account information services.

The API Provider **should** offer functionality (e.g. search, sort, filter) to enable a Customer to search for the relevant access. This will be of particular benefit as the number of consents given by a Customer to Third Parties increases.

The API Provider **should** describe the data being accessed using the structure and language recommended by API Centre.

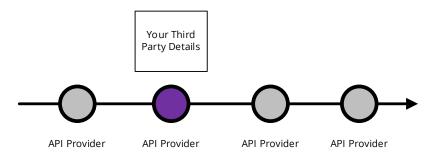
The API Provider should present the data at a Data Cluster level and allow the Customer to expand the level of detail to show each Data Permission.

The API Provider **should** make the status of Third Party access clear by the use of emboldened words. The API Provider should also make it clear, which Customer party provided the Third Party access, in the case of joint/multiple account holders.



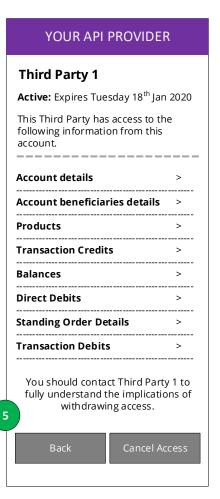


#### 4.1.3.4.2 Your Third Parties details



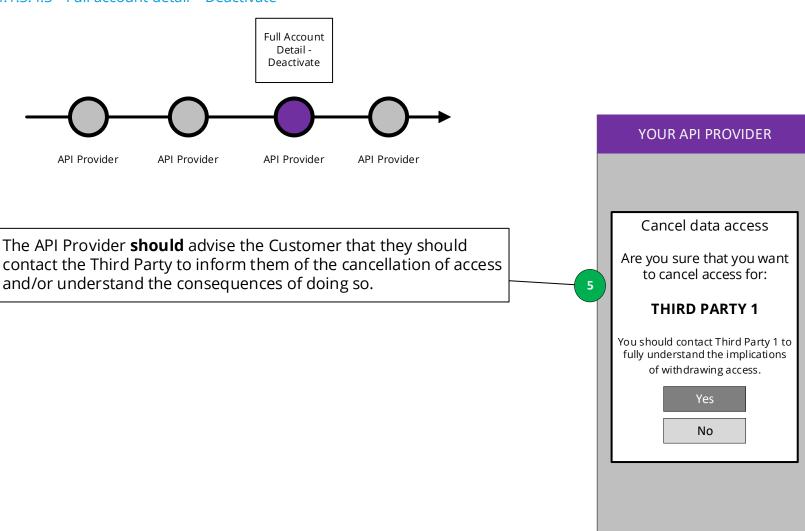
The access dashboard **must** allow a Customer to view or cancel the access they have given consent to. These functions "cancel access" and "back" should be given equal prominence when offered to the Customer.

The API Provider **should** advise Customers that they should contact the associated Third Party to inform them of the cancellation of access and/or understand the consequences of doing so.



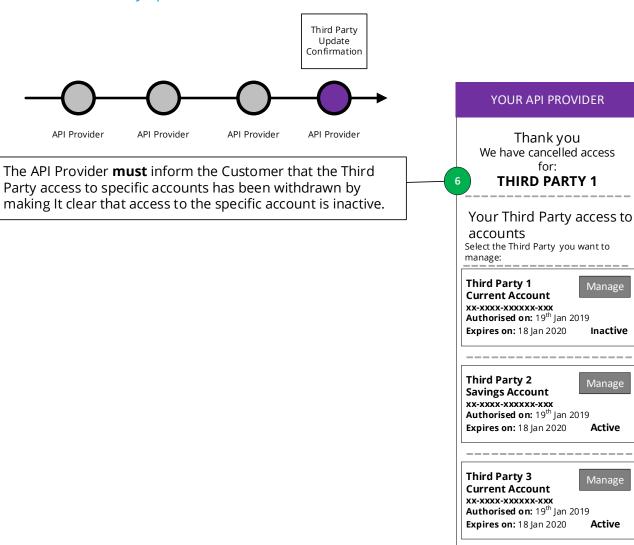


#### 4.1.3.4.3 Full account detail – Deactivate





#### 4.1.3.4.4 Third Party update confirmation





# 4.2 Permissions and Data Clusters for Account Information Services journeys

#### 4.2.1 Permissions

In the Account Information Services Standards API design, data elements are logically grouped together into "permissions". It is at this level that Third Parties request data access. If they request access to a specific permission, they will have access to all the data elements in the permission. This provides a pragmatic approach, allowing Third Parties to be selective but at the same time creating a consent process that is at an acceptable level of granularity for the Customer. Details of the data elements within each permission are included in the API technical specifications.

#### 4.2.2 Data clusters

OBIE Customer research shows that grouping permissions together and adding another layer of description aids the Customer's understanding of the data they are being asked to consent to share. This approach also allows a consistency of language across Third Parties and API Providers to provide additional comfort to Customers that they are sharing the data they intend to. If consistent language is used across all Standards Users this will drive Customer familiarity and adoption. These groups of permissions are known as Data Clusters. Data Clusters are not reflected in the API specifications, they are purely a presentational layer on top of permissions to aid Customer understanding.

# 4.2.3 Data clusters structure and language

The following table describes how permissions should be grouped into Data Clusters and the language that **should** be used to describe the data at each of these levels. Both Third Parties and API Providers **should** describe the data being shared at a Data Cluster level and allow the Customer to "drill-down" to see the detail at permission level using the permission language setout in the table below.

Where both Basic and Detail permissions are available from the same API end point, the Detail permission contains all data elements of the Basic permission plus the additional elements described in the table.



Data cluster language	API end points	Permissions	Permissions language	Information available
	Accounts	Accounts Basic	Any other name by which you refer to this account, and/or the currency of the account.	Currency of the account, Nickname of account (E.g. 'Jakes Household account')
Your Account Details		Accounts Detail	Your account name, number	Account Name, Account Number
Details	Balances	Balances	Your account balance	Amount, Currency, Credit/Debit, Type of Balance, Date/Time, Credit Line
	All where PAN is available	PAN	Your card number	PAN masked or unmasked depending on how API Providers displays online currently.
	Beneficiaries	Beneficiaries Basic	Payee agreements you have set up	List of Beneficiaries
Your Regular	вепепсіагіеѕ	Beneficiaries Detail	Details of Payee agreements you have set up	Details of Beneficiaries account information (Name, Account) (plus all data provided in Beneficiaries Basic).
Payments	Standing orders	Standing Order Basic	Your Standing Orders	SO Info, Frequency, Creditor Reference Info, First/Next/Final Payment information
		Standing Order Detail	Details of your Standing Orders	Details of Creditor Account Information (Name, Account) (plus all data provided in Standing Order Basic)



Data cluster language	API end points	Permissions	Permissions language	Information available
	Direct debits	Direct Debits	Your Direct Debits	Mandate info, Status, Name, Previous payment information
	Scheduled payments	Scheduled payments basic	Recurring and future dated payments	Scheduled dates, amount, reference. Does not include information about the beneficiary.
		Scheduled payments detail	Details of recurring and future dated payments	Scheduled dates, amount, reference. Includes information about the beneficiary.
	Transactions	Transactions basic credits	Your incoming transactions	Transaction Information on payments made into the Customer's account (Reference, Amount, Status, Booking Data Info, Value Date info, Transaction Code). Does not include information about the entity that made the payment.
Your account		Transactions basic debits	Your outgoing transactions	Same as above, but for debits.
transactions		Transactions detail credits	Details of your incoming transactions	Transaction Information on payments made into the Customer's account (Reference, Amount, Status, Booking Data Info, Value Date info, Transaction Code). Includes information about the entity that made the payment.
		Transactions detailed debits	Details of your outgoing transactions	Same as above but for debits.



Data cluster language	API end points	Permissions	Permissions language	Information available
		Transactions Basic	Your transactions	Transaction Information on payments for both credits in and debits out of the Customer's account (Reference, Amount, Status, Booking Data Info, Value Date info, Transaction Code. Does not include information about the payer/payee.
		Transactions detail	Details of your transactions	Transaction Information on payments made both credits in and debits out of the Customer's account (Reference, Amount, Status, Booking Data Info, Value Date info, Transaction Code). Includes information about the payer/payee.
	Statements	Statements basic	Information contained in your statement	All statement information excluding specific amounts related to various balance types, payments due etc.
Your statements		Statements detail	Details of information contained in your statement	All statement information including specific amounts related to various balance types, payments due etc.
	Offers	Offers	Offers available on your account	Balance transfer, promotional rates, limit increases, start and end dates.
Contact and party details	Account specific:	Party	The full legal name(s) of account holder(s).	The name of the account. Full Legal Name(s), Account Role(s), Beneficial Ownership, Legal Structure, Address or addresses, telephone numbers and email address as held by the bank/card issuer and party type (sole/joint etc.).



Data cluster language	API end points	Permissions	Permissions language	Information available
	Party		Address(es), telephone number(s) and email address(es)*	



# 4.2.4 Optional data

If, with the consent of the Customer, a Third Party requests additional information, an API Provider may only provide this to a Third Party if it has authority from the Customer to use and disclose the additional information in that manner.

# 4.2.5 Relevance of data cluster against product type

The Third Party should ensure that is has business rules that manage the relationship between Data Cluster to product type and omit access to data clusters that are irrelevant to a product type, as well as its service offering.

For example, if a Third Party requests a cluster of data that is irrelevant to the product type associated to a payment account e.g. Direct Debit cluster requested for a Savings Account product type, the API Provider may provide that cluster as empty.

**NOTE**: With respect to the clusters and permissions language, the API Provider should consider whether the language that is displayed to the Customer is appropriate when the information being accessed relates to more than one party. For example, "Your data" may need to be adapted to just "data" to indicate to the Customer that the account information being displayed may not be solely specific to them, as is the case of joint accounts when the account information of both parties is requested.



# 5 Payment Initiation Services (PIS)

One of the primary ambitions of the Guidelines is to provide simplification and consistency of the API Standards implementation. Therefore, we have defined and illustrated a core set of payment initiation journeys.

The API Centre API Standards support Payment Initiation Services that enable a Third Party to initiate a payment order, with explicit consent, from the Customer's account held at their API Provider.

The Third Party is then further able to retrieve the status of a payment order and to retrieve a consent from the API Provider.

This section describes how each of the Standard Users (Third Parties and API Providers) in the delivery of these services can optimise the Customer experience for these services. Furthermore, it provides some clarifications to these Standard Users on the use of the APIs which are not covered by the technical specifications, and some best practice guidelines for implementation of the Customer journeys.

# 5.1 Core Payment Initiation Services journeys

# 5.1.1 Single domestic payments – Account selection at Third Party

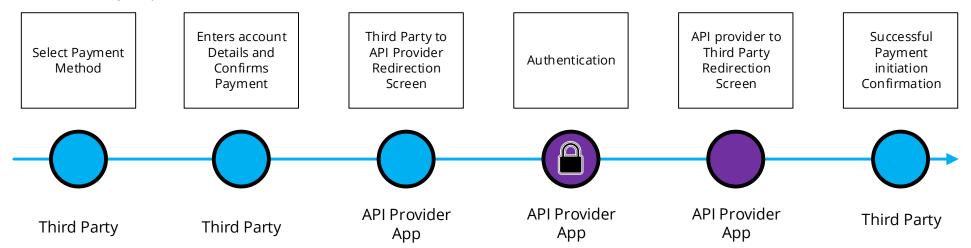
## 5.1.1.1 Journey description

A Customer can initiate an instruction to their API Provider to make a one-off payment for a specific amount to a specific payee by providing their consent to a Third Party.

Once all information for a complete payment order (including the Customer's account details) is passed from the Third Party to the API Provider, and the Customer has been authenticated, the Customer should be directed back to the Third Party domain without any further steps taking place in the API Provider domain.

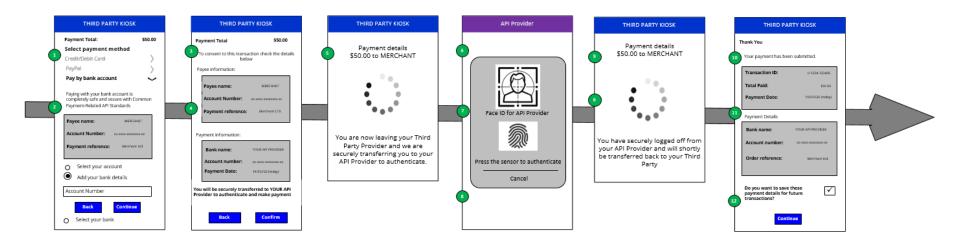


# 5.1.1.2 Journey map





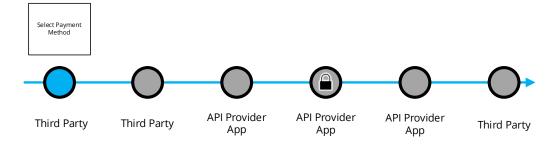
# 5.1.1.3 Wireframe journey





### 5.1.1.4 Wireframe annotations

## 5.1.1.4.1 Select payment method



#### **Minimum Set of Parameters**

The Third Party **must** <u>either</u> allow the Customer to specify the below minimum set of parameters <u>or</u> pre-populate them for the Customer:

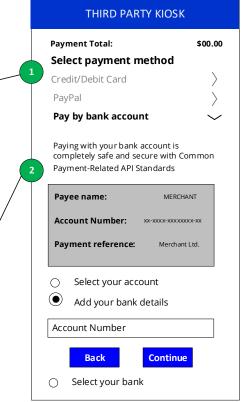
- Payment Amount and Currency.
- Payee Account Name.
- Payee Account Identification details (e.g. account number).
- Payment Reference This is optional but it is good practice to be populated for a payment.
- Any supplementary information required which the API Provider has published as required and is specific to that API Provider.

## **Customer payment Account Selection**

The Third Party **must** provide the Customer at least one of the following options:

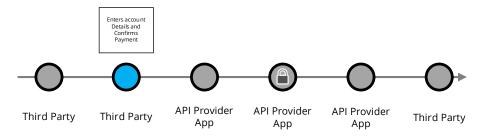
- Enter their Payer payment Account Identification details. The Third Party must allow Customers to enter their payment Account Identification details in at least one of the ways specified in the API Centre API Specifications.
- Select their Account Identification details (this assumes they have been saved previously).
- Select their API Provider in order to select their Customers payment Account from there later on in the journey.

Note 1: In some of the above cases, the Third Party may also need the Customer to provide their API Provider name so that the Third Party can check whether an API Provider will be able to match the account identifier to the underlying Customer payment account.





## 5.1.1.4.2 Enters the account details and confirms payment



#### **Customer Consent to Third Party**

The Third Party **should** request the Customer consent to the payment in a clear and specific manner. The Third Party **must** display the following information in the consent screen:

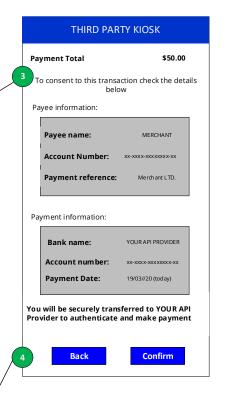
- Payment Amount and Currency.
- · Payee Account Name.
- Payment Reference, and any supplementary info, if it has been entered by The Customer or prepopulated by the Third Party in item #1.
- Customer payment Account Identification and/or the selected API Provider (based on item #2 options)
- Note 1: if Customer payment Account identification is selected in item #2, the Third
  Party should mask the Customer payment Account details on the consent screen.
  Otherwise, if the Customer payment Account identification has been input by the
  Customer in item #2, the Third Party should not mask these details to allow the
  Customer to check and verify correctness.
- Note 2: if Customer payment Account identification is provided by the Customer in item #2, the Third Party could use this to identify and display the API Provider without having to ask the Customer.

#### For Payee Account Identification details:

- If this has been provided by the Customer in item #1, then the Third Party
  must also display this in the consent screen to allow the Customer to check and
  verify correctness.
- If this has been pre-populated by the Third Party (e.g. in a eCommerce payment scenario) the Third Party could choose whether to display this information or not.

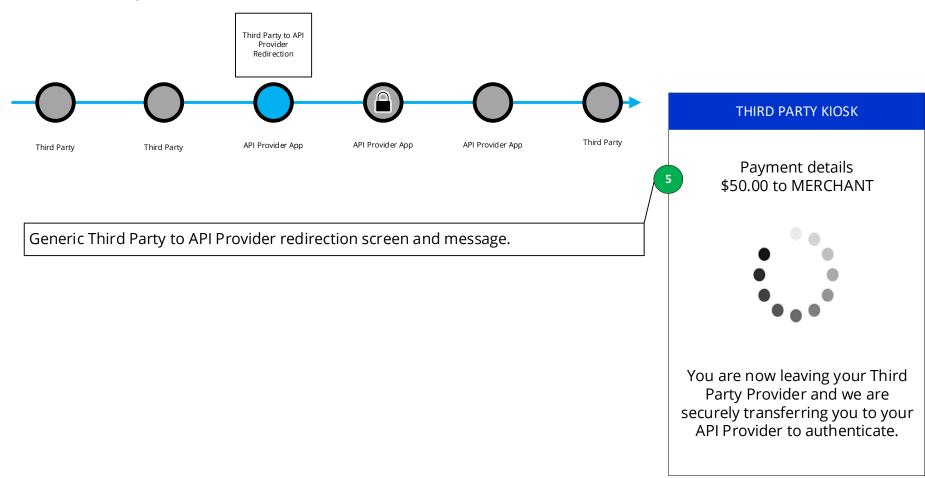
The Third Party **should** provide messaging to inform the Customer that they will be taken to their API Provider to complete the payment.

Example wording: "You will be securely transferred to YOUR API PROVIDER to authenticate and make the payment".



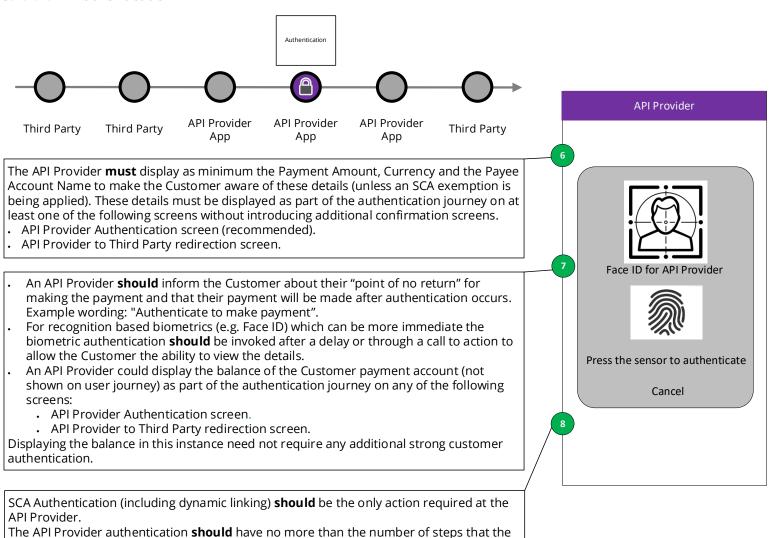


# 5.1.1.4.3 Third Party to API Provider redirection





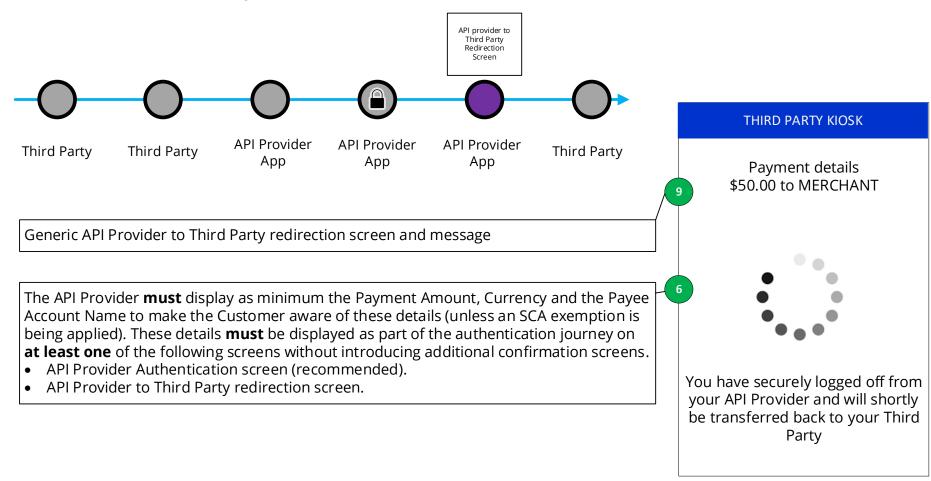
#### 5.1.1.4.4 Authentication



Customer would experience when directly accessing the API Provider channel.

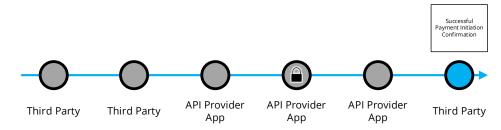


## 5.1.1.4.5 API Provider to Third Party redirection screen





## 5.1.1.4.6 Successful Payment Initiation confirmation



#### **Third Party Confirmation**

A Third Party **must** display the information received from the API Provider. This information may include:

- The unique identifier assigned to the payment instruction by the API Provider.
- The payment status (and status update date & time) Confirmation of successful payment initiation.

If received by an API Provider, the Third Party must display any of the following information regarding initiation and execution of the payment:

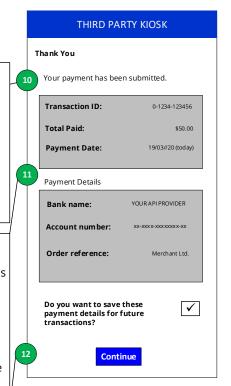
- The expected payment execution date & time.
- The expected settlement date & time (i.e. the value date of the payment).
- The API Provider charges (where applicable).

If a Customer provides their payment account identification details (as per item #2 options), the Third Party could, with the consent of the Customer, save the account details for future transactions (such as making further payments or initiating refunds back to a Customer) where this is part of the payment initiation service explicitly requested by the Customer. For example, a merchant, upon request from the Customer, may initiate a refund back to the Customer, by instructing the same Third Party that initiated the initial Customer transaction to use the saved Customer payment account identification details as the beneficiary details for the refund. This will be dependant on the same Third Party being used by both the Customer and the merchant and their specific contractual terms.

Moreover, the Third Party can use this consent to provide a hint of the Customer identity using the customer identifier as part of the payment request to enable the subsequent payment journey.

### **Further Payment Status Update**

The Third Party **should** follow up with the API Provider in order to check and update the Customer with the most updated information that can be received by an API Provider in relation to the execution of the payment.





# 5.1.2 Single domestic payments – Account selection at API Provider

# 5.1.2.1 Journey description

There are cases where the payment order submitted by Third Parties to API Providers is incomplete, such as where the Customer's account selection has not yet occurred.

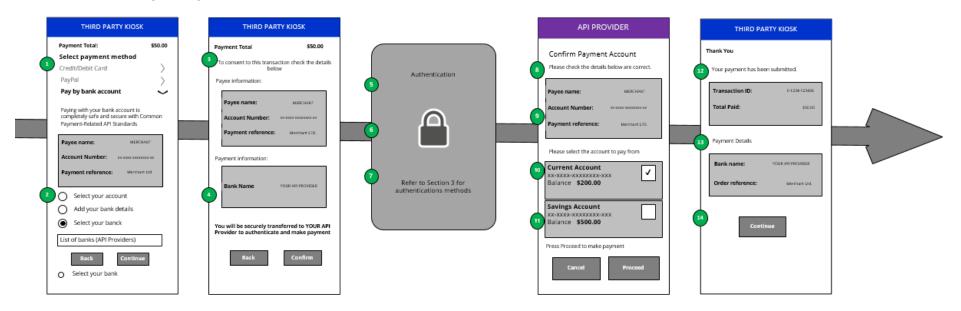


# 5.1.2.2 Journey map

Payment **Payment** Select API Information Select Account **Payment** Authentication Confirmation Provider Summary and and Proceed Confirm **API Provider API Provider** Third Party Third Party Third Party App App



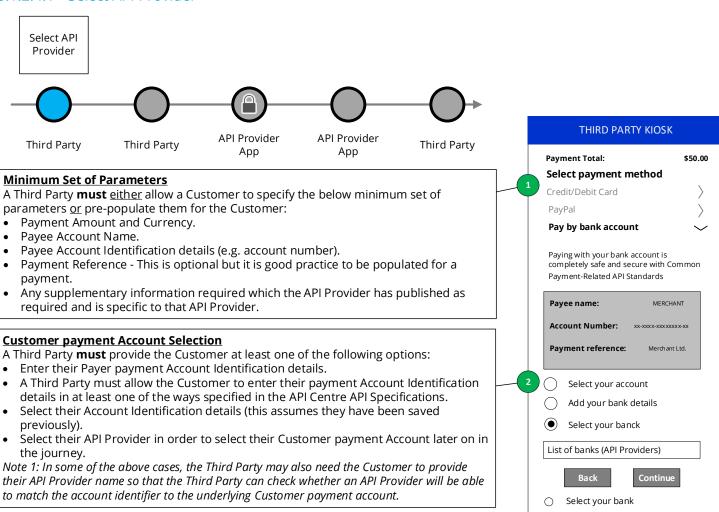
# 5.1.2.3 Wireframe journey





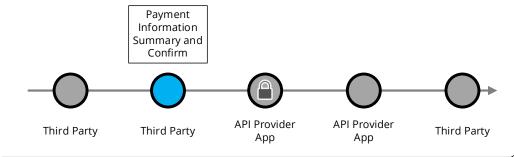
#### 5.1.2.4 Wireframe annotations

### 5.1.2.4.1 Select API Provider





## 5.1.2.4.2 Payment Information summary and consent



#### **Customer Consent to Third Party**

A Third Party **should** request the Customer consent to the payment in a clear and specific manner. A Third Party **must** display the following information in the consent screen:

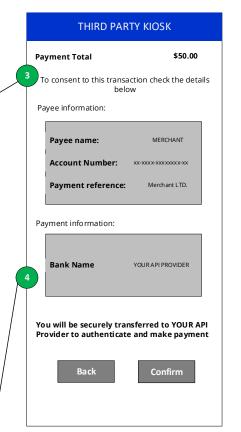
- Payment Amount and Currency.
- Payee Account Name.
- Payment Reference, and any supplementary info, if it has been entered by the Customer or prepopulated by a Third Party in item #1.
- Customer payment Account Identification and/or the selected API Provider (based on item #2 options)
  - Note 1: if Customer payment Account identification is selected in item #2, the Third Party
    should mask the Customer payment Account details on the consent screen. Otherwise, if
    the Customer payment Account identification has been input by Customer's in item #2, a
    Third Party should not mask these details to allow Customer's to check and verify
    correctness.
  - Note 2: if Customer payment Account identification is provided by a Customer in item #2, a Third Party could use this to identify and display the API Provider without having to ask the Customer.

For Payee Account Identification details:

- If this has been provided by the Customer in item #1, then a Third Party must also display this in the consent screen to allow a Customer to check and verify correctness.
- If this has been pre-populated by a Third Party (e.g. in a eCommerce payment scenario) a Third Party could choose whether to display this information or not.

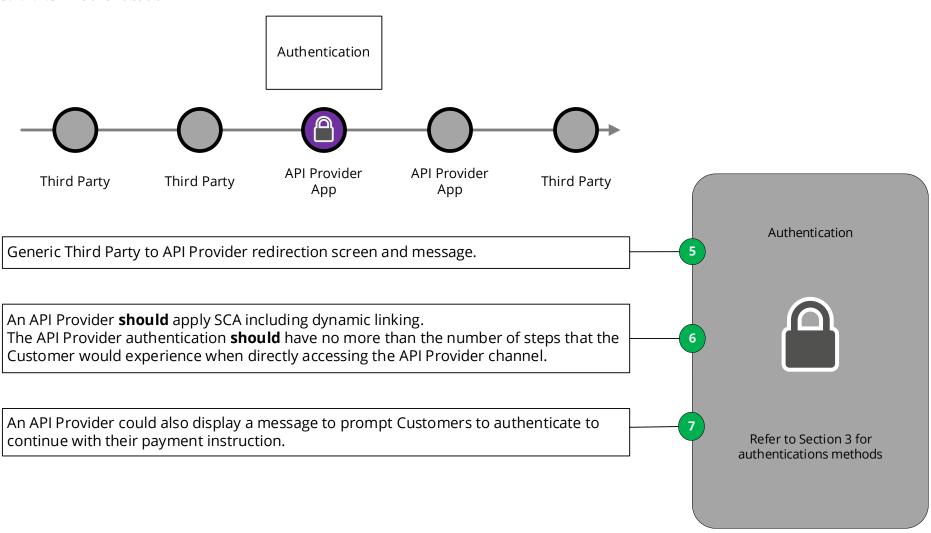
A Third Party **should** provide messaging to inform the Customer that they will be taken to their API Provider to complete the payment.

Example wording: "You will be securely transferred to YOUR API PROVIDER to authenticate and make the payment".



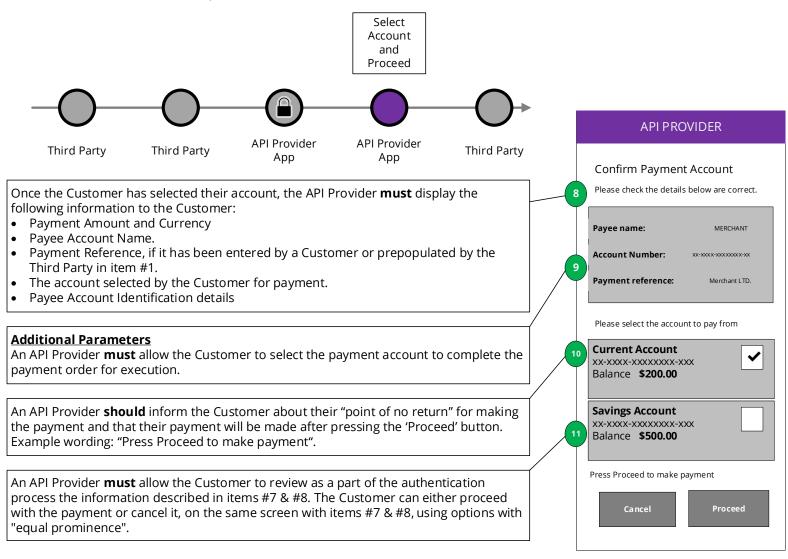


### 5.1.2.4.3 Authentication



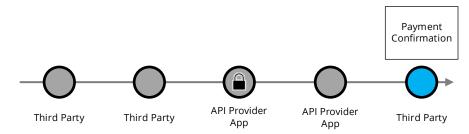


## 5.1.2.4.4 Select account and proceed





## 5.1.2.4.5 Payment confirmation



#### **Third Party Confirmation**

A Third Party **must** display the information received from the API Provider. This information may include:

- The unique identifier assigned to the payment instruction by the API Provider.
- The payment status (and status update date & time) Confirmation of successful payment initiation.

If received by an API Provider, the Third Party must display any of the following information regarding initiation and execution of the payment:

- The expected payment execution date & time.
- The expected settlement date & time (i.e. the value date of the payment).
- API Provider charges (where applicable).

If a Customer provides their payment account identification details (as per item #2 options), the Third Party could, with the consent of the Customer, save the account details for future transactions (such as making further payments or initiating refunds back to Customers) where this is part of the payment initiation service explicitly requested by the Customer. For example, a merchant, upon request from the Customer, may initiate a refund back to the Customer, by instructing the same Third Party that initiated the initial Customer transaction to use the saved Customer payment account identification details as the beneficiary details for the refund. This will be dependant on the same Third Party being used by both the Customer and the merchant and their specific contractual terms.

Moreover, the Third Party can use this consent to provide a hint of the Customer identity using the customer identifier as part of the payment request to enable the subsequent payment journey.

#### **Further Payment Status Update**

A Third Party **should** follow up with the API Provider in order to check and update the Customer with the most up to date information that can be received by an API Provider in relation to the execution of the payment.

